The Journal of the American Medical Association

Published under the Auspices of the Board of Trustees

VOL. XLII. CHICAGO, ILLINOIS, APRIL 2, 1904. No. 14.

Original Articles.

THE USE OF ETHYL CHLORID AS A GENERAL ANESTHETIC IN GYNECOLOGY.

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42
904

DISCUSSION OF ANESTHETICS IN PRESENT USE.

The suggestion of a new agent for the purpose of securing general anesthesia will possibly seem unnecessary at this time, inasmuch as the agents now employed fill nearly all the indications required in anesthetic work. When we come, however, to analyze the action of these drugs, we find each of them has disadvantages which make us long for something by which these particular annoyances can be obviated. The length of time required to secure narcosis and to eliminate the drug, aside from the actual danger of the agents, make ether and chloroform unsatisfactory agents to secure anesthesia for an examination or for a short operation. The frequently prolonged nausea and vomiting associated with or following the administration of these agents for even a short time causes the patient to hesitate about undergoing the subsequent operation when they have been employed for merely diagnostic purposes. Perhaps in no department of medicine is the term anesthesia more repugnant than to the gynecologic patient; for in many instances the condition for which the patient consults the gynecologist has been induced by parturient trauma or infection, and during this time she has been anesthetized by one of our older agents, and, therefore, has learned of their annoying after-effects. Hence, if we can assure our patient that we can administer an agent free from these annoyances, the term will not have the same terrifying influence. The greater freedom from muscular action frequently renders an examination under anesthesia necessary in order to secure an accurate diagnosis on which subsequent therapeutic or surgical measures are to be based. Many will undoubtedly assert that nitrous oxid or the ethyl bromid would meet every indication for such diagnostic purposes, but they are not without disadvantage. Both act quickly and are evanescent in their effects, and the latter drug is likely to produce severe nausea. The former requires a special apparatus for its administration which is rather cumbersome to transport, and its administrator must exercise care to maintain its effects sufficiently long to permit of a prolonged examination or the performance of an operative procedure. The ethyl bromid is free from the above objections, but leaves an offensive garlicky odor on the breath which persists for two or three days.

The agent under consideration in this paper is free from these objections; indeed, so satisfactory is its action as to cause us to wonder that its salutary effects should have been so long overlooked. One probable explanation for this has been its excessive volatileness, which rendered it rather difficult to utilize and the associated expense which still renders its use unlikely in a general clinic.

CHEMISTRY OF ETHYL CHLORID.

Chemically, ethyl chlorid is one of the haloid substitution products derived from ethyl alcohol, and it is formed by the halogen element, chlorin, replacing the hydroxyl group in the alcohol. Various methods are employed in the preparation of this agent, but those most frequently used are as follows: First, by passing gaseous hydrochloric acid into a boiling solution of zinc chlorid in twice its weight of alcohol ($C_2H_5OH+HCl=C_2H_5Cl+HOH$); second, by the action of perchlorid of phosphorus on alcohol ($C_2H_5OH+PCl_5Cl_5=HCl+PCl_3OC_2H_5Cl$); third, by the action of chlorin on the hydrate of ethyl. Physically, ethyl chlorid is a clear, colorless liquid of rather pleasant odor, with an aroma somewhat similar to chloroform. It evaporates very rapidly at ordinary room temperature, and, therefore, must be kept in hermetically sealed vehicles. The specific gravity of this substance is 0.92. Its boiling point is 12.5 C. It is a highly combustible agent, and in burning emits a yellowish-green flame.

PHYSIOLOGIC ACTION.

The physiologic action of ethyl chlorid still remains somewhat a disputed question, though the general teaching, and that almost generally accepted, is that the influence of the agent on the circulation is at first to increase the frequency of the pulse-beats. After anesthesia is complete, however, the pulse will invariably regain its normal calmness. This primary disturbance of the circulation is undoubtedly due to nervous excitement and not to any direct influence of the drug, for, as is well known, this primary acceleration of the circulation is always found to precede the initial administration of any anesthetic. The arterial tension is, as a rule, decreased. Wood and Cerna, from their experiments with this agent on animals, found that it lowered arterial pressure during deep narcosis, and that as soon as the anesthetic was withdrawn, it regained its normal condition. Koenig, from his experiments on animals, has reached practically the same conclusions. Moreover, he found that the decrease in arterial tension was of centric origin, due to the influence of the agent on the pneumogastrics, since it disappeared after the vagi were cut.

Following the section of these nerves the arterial pressure increased and remained thus until the completion of his experiment. This observer further discovered that the pneumogastrics did not react to irritation when anesthesia was complete. Malherbe and Roubinovich carried out some experiments with Potain's sphygmomanometer in order to determine the exact influence of ethyl chlorid on the arterial pressure in man. The conclusions they reached are, in the main, in accord with those epitomized by the other investigators mentioned. Of the 24 cases examined by Malherbe and Roubinovich, arterial tension was decreased in 22, and the frequency of the pulse-beats followed equally the modifications in the degree of arterial pressure; during deep sleep diminishing and increasing and attaining finally the normal number as consciousness was restored. McCardie, from his large personal experience with this agent, also claims that the arterial tension is, as a rule, lower during the administration of ethyl chlorid, and that during deep narcosis the pulse becomes slower than normal, but usually maintains its regularity. Royer carried out certain experiments with this agent in his service at the Jefferson Medical College Hospital, and he found that its influence on the circulation was in accord with the observations of the other men mentioned. From our own personal experiments with this agent we found that in patients with a normal circulatory apparatus there was usually a slight decrease in arterial tension. There was no decided disturbance in the pulse-beat. At the beginning of the administration, however, there was a certain increase in the frequency of the pulsations, but this, of course, was due to the psychic disturbance of the patient, and not from any direct action of the drug. The respirations were generally stimulated both in frequency and depth, and from the perusal of the literature we find that this was observed by all of the investigators mentioned in this paper. A point of great importance, and one which we desire to set forth with emphasis, is that very little irritation results from the administration of ethyl chlorid on the respiratory mucous membrane. Furthermore, the distressing and often embarrassing condition of excessive secretion was scarcely ever observed from its administration. Malherbe and Roubinovich discovered in the urine of some of their patients which was normal before the anesthetic was given, the presence of albumin and bile pigments after the restoration of consciousness, but these substances disappeared in a few days. They conclude, therefore, that the kidneys and liver participate in the intoxication induced by ethyl chlorid.

SAFETY.

Regarding the safety of ethyl chlorid as a general anesthetic, from our experience we confidently believe that it is one of the safest now at the disposal of the practicing physician. McCardie asserts that it is the safest of all anesthetics except nitrous oxid, and that the death rate might be placed at one in many hundred thousand. Cumston ventures the statement that on account of the facility with which it is given and its harmlessness, an experienced assistant is not required. This assertion, however, does not seem to us justifiable. Cumston further asserts that chlorid of ethyl may be given to subjects at any age, and particularly at the two extremes of life at a time, he says, when the organism does not as yet present, or, on the other hand, has lost that vitality which is requisite to support the shock of our older anesthetics. Despite the harmless qualities of the drug, we believe that its administration or the administration of any anesthetic, should be trusted only to one skilled in the employment of such agents and trained to recognize their dangers. Seitz of Konstanz reports 16,000 cases of ethyl chlorid narcosis collected throughout the world. Among these there was but one death, and that in a very unfavorable subject. Ware has collected 11,207 cases of ethyl chlorid narcosis, and in this number one death is recorded. This fatality also occurred in a patient who exhibited many physical signs contradictory to the use of a general anesthetic. Soullier of Lyons records 8,417 cases of ethyl chlorid narcosis, and in all this number there were no symptoms induced that would condemn the employment of this agent. Lotheissen, on the other hand, asserts that statistics indicate that chlorid of ethyl stands, as regards its mortality, next to chloroform. This author asserts that death from chloroform anesthesia occurs once in 2,075 times, and from ethyl chlorid once in 2,550 times. The unfortunate result recorded in Lotheissen's series of cases occurred in a patient who manifested evidence sufficient to contraindicate the employment of any general anesthetic.

From a review of statistics and our own experience, we believe that the figures mentioned by Lotheissen relative to the chlorid of ethyl are far too high, and that his convictions regarding its safety have undoubtedly been fostered by the serious results obtained in one of his patients. The wide diversity of opinion regarding the safety of this remedy as a general anesthetic is due, we believe, to its comparative newness. In our judgment it is decidedly safer than chloroform and possibly safer than ether, and undoubtedly safer than its sister anesthetic, bromid of ethyl. This statement, too, we believe future experience will prove. Moreover, we have never observed a symptom from its use that rendered us apprehensive. Indeed, the assertion of Weissner would seem to indicate that the drug is really safer than ether. He states that in Prof. von Hacker's clinic in Innsbruck, ethyl chlorid is used whenever it does not seem safe to use ether or chloroform, as in high degrees of circulatory interruption, fatty degeneration of the heart, disease of the respiratory organs, persons enfeebled by great loss of blood, and those suffering from nervous shock. It is universally taught and accepted that the employment of any of our older anesthetics, such as ether or chloroform in patients with any of the conditions mentioned above, should be used, if at all, with anticipating caution.

ADMINISTRATION.

Ethyl chlorid was probably first used as a general anesthetic by Heyfelder, in 1848. In 1880 it was tried on animals by a committee of the British Medical Association and its use condemned, and for a time its use as a general anesthetic was abandoned. In 1895-96 Carlson and Thiesing again took it up and its use became more general, particularly in the practice of dentistry. Soullier of Lyons, in 1895, carried out clinical experiments with this agent in the hospitals at Lyons. He records 8,417 narcoses with ethyl chlorid without any direful results.

The first scientific work, however, and the first systematic employment of ethyl chlorid were probably done in 1897-98, by Ludwig and Lotheissen in Prof. von Hacker's clinic at the University of Innsbruck. Weissner later became chief of von Hacker's clinic, and carried on observations in 400 cases of ethyl chlorid narcosis. McCardie, in 1902-03, studied the value of the drug in 620 general narcoses, and he is enthusiastic in

his praise of the agent, claiming that it contains all the requisites of a perfect anesthetic, and these we find are set forth by Tuttle as: 1, Safety to the patient; 2, insensibility to pain; 3, complete relaxation; 4, easy and rapid production of effect; 5, freedom from dangers and disagreeable after-effects; and, 6, simplicity of administration. Tuttle believes, too, that these facilities are nearly all inherent in ethyl chlorid.

Ethyl chlorid can be administered for the purpose of inducing general anesthesia by simply spraying it on a gauze compress, though perhaps the employment of one of the specially devised inhalers would be advantageous. One of the best inhalers now in use is the Ormsby ether inhaler devised by Hewitt. This instrument contains a movable air chamber which can be heated in hot water, and, therefore, prevent freezing and thus economize the use of the anesthetic.

Cumston recommends the inhaler devised by Tiemann & Company of New York, and in his hands it has proved very satisfactory, besides it is inexpensive. This inhaler is composed of an oval rubber cone containing a fenestrum in its roof about three cm. in diameter. Into this hole or opening, a tube five cm. in length is secured, through which the ethyl chlorid is sprayed into the cone. To prevent the anesthetic coming in contact with the patient's face several layers of sterile gauze are previously secured over the end of the tube. The same object is accomplished by inserting loosely a small plug of cotton in the lower end of the tube, with a single piece of gauze over the opening. We have employed this inhaler in our practice also, and it always gave us good results. In our experience a cone made of ordinary cardboard covered with gauze, with its base so constructed as to fit snugly over the face of the patient, has proved of good service in our hands. Several layers of gauze are secured over the opening on to which the anesthetic is to be sprayed. A rapid evaporation or escape of the anesthetic is prevented or minimized by placing a gauze pad over this. In administering ethyl chlorid for the purpose of securing general narcosis, the patient should be prepared as is done for the administration of any general anesthetic. The cone is applied tightly over the patient's face in order to prevent excessive intake of air. The patient is then instructed to breathe naturally. The agent is sprayed on to the cone more or less constantly from a tube with an opening sufficiently large to allow the rapid escape of the agent on to the cone. Should this not occur and if anesthesia is not promptly effected, two tubes should be used.

The time required for complete anesthesia is usually from one-half to two minutes, but with some persons a longer time is sometimes necessary. We have never failed to secure operative anesthesia, though in a certain number of our cases relaxation was more marked than in others. Most observers assert that complete muscular relaxation is never obtained, and this statement we believe in the main correct, though in our series of cases we noted in a few instances narcosis equivalent to complete relaxation. Lotheissen asserts that in cases of incomplete relaxation, the previous hypodermic administration of heroin would readily overcome the condition. It is asserted that excitement sometimes results from the administration of ethyl chlorid, and this condition McCardie says is due to the too free admission of air, though, at the same time, a certain amount of air must be allowed in all cases.

In our series of cases defensive disturbances were rarely noted. Thus far the teaching has been that ethyl chlorid finds its true service in the domain of minor surgery, or in that class of cases where prolonged anesthesia is not required, and many observers claim that it is of decided advantage preliminary to the administration of ether. A few men have used the drug for various major operations and report having had patients under its influence for many minutes. We ourselves have employed ethyl chlorid for almost every condition indicating the use of a general anesthetic. We have used it preliminary to the administration of ether, and heartily concur with the opinion of many men that the agent rapidly overcomes the excitation that results from the first stage of ether narcosis. Further, it undoubtedly decreases the amount of ether required, and, therefore, to a certain extent, combats the post-etherization nausea and vomiting. We have had patients under the influence of the anesthetic as long as fifty-four minutes, and under its influence have performed hysterectomy and the various combined operations on the pelvic floor and intrapelvic viscera.

USE IN GYNECOLOGY.

In gynecologic work ethyl chlorid will be especially employed for administration to allay the pain and relieve muscular contraction in abdominal pelvic examinations. Its employment will frequently permit of an accurate diagnosis in what would otherwise be an obscure case. The short time required for anesthesia, the rapidity with which the patient will recover from its effects, and the decreased tendency to nausea and vomiting, will allow its employment in office practice, with the assurance that the patient can return home without the need of prolonged attention.

The same indications will lead to its employment in all operations of minor character where prolonged anesthesia will not be required. In enfeebled patients requiring vaginal incision for pelvic drainage, it is an ideal agent, for its administration need not be begun until everything is prepared for the incision, so that the patient will be under its influence only a few minutes.

Probably its most effective employment will be as a preliminary to the administration of ether or chloroform, by which the distress and sensation of asphyxia produced by the latter agents will be avoided. A nervous woman may be brought quickly under the influence of the ethyl chlorid, and the ether or chloroform follow without the patient experiencing any of the ordinary discomfort of an anesthetic, and consequently, without a struggle. Her convalescence from the effects of the anesthetic is more rapid because she has not undergone so thorough a saturation with it.

DISADVANTAGES.

The principal disadvantages of the agent as a general anesthetic are:

1. The patient passes under and out of its influence so quickly that the administrator must be unusually expert to avoid, on the one hand, profound anesthesia, and on the other, the emergence from its effects at an important stage of the operative procedure.

2. The expense of the drug excludes its use in a general clinic, but the increased employment of this agent which must necessarily follow the general recognition of its advantages, will doubtless result in a reduction of its cost.

The Gauge of Sanitation.—The death rate of infants and young children—those under five years of age—is the true test of the sanitary conditions and of the sanitary administration of a community.—*Texas Medical News.*

THE ETIOLOGY OF TABES DORSALIS.

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Tabes dorsalis was one of the first of the diseases of the spinal cord to be recognized, and is one of the most frequent types of sclerosis which occurs in the cord; yet after more than half a century of study, there still exists a wide difference of opinion, both as to its etiology and pathology.

All our real knowledge as to its pathology may be summed up as follows: That it is a degeneration of the posterior columns of the spinal cord, or of the peripheral spinal sensory nerves, or both; and that this process involves primarily the posterior spinal ganglia or analogous neurons, and later involves the cord and peripheral nerves. But how these changes are caused, pathology has as yet offered us no explanation, and we must still rely for an explanation on the facts furnished by clinical observation.

Tabes is a disease most common in young and middle life, but its usual long and slow development often causes it to remain unrecognized for years, and thus the real cause may escape detection and the disease be assigned to some intervening factor. In a recent paper by Bramwell, who has analyzed 155 cases, the numbers, according to the age of onset, were, in the third decade, 79; fourth, 77; fifth, 35; sixth, 18; and seventh, 2. In 565 cases collected by Bonar, Thomas, Riley and Bramwell, there were in the second decade, 12.9 per cent.; third, 43.9 per cent.; fourth, 31.4 per cent.; and fifth, 11.6 per cent. In Fulton's 55 reported cases, the numbers according to decades were, third, 5; fourth, 16; fifth, 19; sixth, 7; and seventh, 2. A record of 103 cases of my own arranged according to the age of invasion, shows for the second decade, 1; third, 3; fourth, 47; fifth, 35; sixth, 16; and seventh, 1.

These figures, then, support the contention stated and are also held by some authorities to indicate that, by occurring at a time of life when the resisting powers are beginning to be impaired while the activity is undiminished, it is a disease of lowered vitality. This latter contention is also supported by the fact that the disease is much more frequent in males and those who live in cities. In my own cases, only four lived in the country, and only six were women.

The majority of writers assign numerous causes as the producing factors for tabes, such as syphilis, injuries to the cord and peripheral nerves, overexertion, exposure to cold and wet, acute rheumatism, typhoid and typhus fevers, diphtheria, pneumonia, influenza, alcoholism, sexual excess, severe hemorrhages, prolonged labors, and Fulton states that a number of his cases suffered for months or years from chronic gastro-intestinal disorders before the development of the tabes. Besides those cases for which we can find a recognized cause, we not infrequently see cases for which we are unable to assign an etiology. The relative frequency of these assigned causes as shown by Bramwell's reported cases, was, syphilis, 72.3 per cent.; alcoholism, 6.4 per cent.; injuries and exposures, each, 3.8 per cent.; mental worry, overexertion, diphtheria and scarlet fever, each, 1.3 per cent. In Fulton's cases, the frequency was, syphilis, 42 per cent.; alcoholism, 22.1 per cent.; influenza, 20.3 per cent., and typhoid fever and injuries to the spine, each, 7.4 per cent. In my own cases, the assigned causes were, syphilis, 59.9 per cent.; alcoholism, 5.7 per cent.; secondary to multiple neuritis, 4.3 per cent.; injuries to the spine, 4.3 per cent.; injuries to the lower limbs, 2.9 per cent.; blows on the back, 4.3 per cent.; rheumatism, 1.4 per cent.; sexual excess, 1.4 per cent.; diphtheria, 4.3 per cent.; and unknown, 11.5 per cent.

It is evident, then, that tabes is a disease which may either follow a large number of different causes, or that these assigned causes are not the real exciting causes; and that the tabes existed before the occurrence of the assigned cause and was aggravated by it, or attention was first directed to the tabes by the intercurrent disease. This situation is further complicated by the fact that it is impossible, either in private or hospital practice, to obtain clinical histories on which to base an opinion which meets with the requirements of a reasonable certainty. The only solution of this problem at the present time appears to be to take up each assigned cause and study the method by which it might produce the disease.

Led by the high percentage assigned to syphilis, it seemed at one time as if the majority of the profession had adopted the theory that tabes was simply a sequela of syphilis; and in those cases in which the occurrence of syphilis could not be proved, it was to be accounted for either on the theory that the infection was so slight that the symptoms escaped recognition, or on the grounds of heredity. This theory is, however, combated on the following grounds: That syphilis is common among the Japanese and negroes, while tabes is rare; that the tabes does not usually appear until long after all the manifestations of the syphilis have disappeared. (In my own cases this period averaged eight years and the extremes varied from two to thirty-three years. In Bramwell's cases this period was more than ten years in 59.5 per cent.) That the number of syphilitics is large, while the number of them who develop tabes is extremely small. In Leyden's 108 tabetic cases, only 28 were proved to be syphilitic, a percentage not above non-tabetic cases; and Lewin found no tabes in 800 syphilitic females, and Glueb found no tabes in 3,000 consecutive cases of syphilis. Beside these arguments against a purely syphilitic origin of tabes, it is further shown that antisyphilitic treatment has no effect in tabes; that the lesion is as degenerative in the non-syphilitic cases as in the syphilitic; that the disease is not a syphilitic one in its pathologic sense, and that all the morbid changes found in tabes also occur in other non-syphilitic diseases. The conflict of opinions of writers is thus shown in their works as follows: "No syphilis, no tabes" (Ferrier); "tabes is a syphilitic process" (Weigert); "it can not be said that tabes never develops unless the patient has had syphilis" (Bailey); "that syphilis is not the only cause" (Gowers); "it is not a syphilitic process or a sequela of syphilis" (Peterson and Burr); "that syphilis is the most important cause, but distinctly not the only cause" (Bramwell); and "that less importance is now being given to syphilis and more attention to the rôle of other poisons" (Fulton).

It is undisputed, then, that syphilis is a cause of tabes, but the method by which it acts has not yet been explained. Syphilis is supposed to be a germ disease, but whether it is the direct action of the toxins on the neurons of the posterior columns, or some secondary change in the metabolism of the body which acts in a similar manner or simply a lowered vitality of these parts or defective blood supply from vascular disease,

is not yet in evidence. That it is due to the direct action of any syphilitic toxin seems impossible when we take into consideration the long period which elapses between the disappearance of all the other manifestations of the infection and the earliest signs of the tabes. Its action, then, if it is a cause, is very different from any other member of its class. The second contention is not yet based on any evidence of the existence of such a body, nor do either of these explanations offer any reason why the posterior columns of the cord are thus involved. A more reasonable explanation can be found in the fact that the posterior columns of the cord are of all the parts of the central nervous system the most poorly supplied with blood, and its venous supply is such as to tend markedly to retard the return of the blood; and thus any cause which tends to diminish either the quantity, quality or pressure of the blood supply to the cord would show its most marked action on the nutrition of the posterior neurons. This seems to be the most logical explanation of the relationship of syphilis and tabes, from its tendency to cause arterial disease.

When we consider the relationship of trauma and tabes, we again find ourselves confronted with a wide difference of opinion among writers. Bailey states "that it is improbable that injury or shock stand in any direct causal relationship to the disease." Prince, "that there is no published case which meets with the requirements of certainty." Gowers, "that one of the causes which can sometimes be clearly traced is injury." Golebiewski, "that the exciting trauma in tabes may act centrally or peripherally. The central injuries are hemorrhage into the cord, concussion or contusion; and the peripheral injuries are sprains, fractures or dislocations of the spine and contusions of the lower extremities." Excluding, then, those cases in which attention was first directed to an already existing tabes by some injury, let us examine the methods by which trauma might cause the disease. It is an established fact that disease of the peripheral portion of the spinal neurons may at times ascend to the columns and gray matter of the cord; and thus disease of the sensory fibers which ascends to the posterior ganglia may, by causing disease in them, cause similar diseased conditions of their central branch and thus ascend to the posterior columns of the cord. It will be remembered that the majority of the fibers of the posterior tracts of the spinal cord are but the central neuro-axon of the posterior spinal ganglia and depend on them for their nutrition. In this way, then, it must be admitted that tabes might be produced. Besides this method, and more frequently, the cord or its membranes may be injured by fracture, dislocation, undue bending of the spine or blows on the back, producing concussion, contusion or hemorrhage into the cord. This may be directly the cause of both the gray matter or tracts of the cord, or a chronic meningitis may occur ending in thickening of the membrane, compression of the cord and peripheral nerves with secondary degenerative changes.

In support of the theory of this method of the production of tabes, the histories of the following cases are of interest:

CASE 1.—Male, aged 43, seen in Kings County Hospital. Four years before admission he fell down a flight of stairs, injuring his right knee. Since that time he has had loss of power in the right leg and thigh, with severe pain and hyperesthesia. Eighteen months before admission he began to notice unsteadiness in walking, numbness of his feet, and attacks of diplopia. Examination showed atrophy of the right thigh and leg, with the classical signs of tabes.

CASE 2.—Female, aged 53, seen in Kings County Hospital. Ten years before admission she fell and received a contused wound of the right knee. Since then she has suffered from severe pains in the right thigh and leg; one year before, they occurred on the left side, and she noticed at that time difficulty in walking. Examination showed a large scar on the right knee and a well-developed tabes.

CASE 3.—Male, aged 43, seen in consultation with Dr. W. Kinne. Two years before he had received a severe blow on the back which rendered him paraplegic and anesthetic below the third ribs with both urinary and fecal incontinence. He gradually improved so that he was able to walk with a cane. Two days before he was seen, he developed severe lightning pains in his body and limbs. Examination showed a well-marked tabes.

CASE 4.—Male, aged 53, seen with Dr. L. S. Pilcher. Two years before he had received a severe blow on the back. This was followed by severe pains radiating from the spine into the hips and thighs, numbness of the feet, and retention of urine. Examination showed a forward displacement of the last two dorsal and first lumbar vertebræ, with a well-marked tabes.

CASE 5.—Male, aged 38, seen in Kings County Hospital. Five years before he was in a trolley collision and received a fracture of two ribs and a contusion over the lumbar spine. Since that time he has suffered from spinal pain and rigidity, and two years later he developed severe pains in the chest and abdomen, often associated with vomiting. Examination showed a marked thickening about the lumbar vertebræ, spasm of the lumbar spinal muscles, producing spinal rigidity, and a well-marked tabes.

CASE 6.—Male, aged 75, seen in consultation with Dr. C. D. Kevin. Always in good health until fifteen years before, when a cellar grating fell on his back. Since then he has suffered from severe pains in his back, radiating into his hips and lower limbs; numbness of his feet, and increasing difficulty in walking. Examination showed a well-marked tabes.

CASE 7.—Male, aged 33, seen in Kings County Hospital. Seven years before he fell from a ladder and received a contusion over the lumbar spine. One year after he began to notice difficulty in walking and girdle sensations. Examination showed a well-developed tabes.

In none of the cases were we able to obtain from the family history or the personal history, or from the physical examination of the patient, any evidence of syphilis or other producing causes.

Alcoholism has been, next to syphilis, the most frequent assigned cause for tabes in my own cases. All had been addicted to the excessive use of the drug for years, and showed the well-known physical changes produced by this agent. In all there was a history of a peripheral neuritis, lasting a year or more before the development of the tabes. Of this class the following history is typical:

CASE 8.—Male, aged 30, seen in Kings County Hospital. He had drank to excess for years, and had been treated in the hospital six months before his present admission for multiple neuritis, and discharged as cured. Present condition had been of three weeks' duration. Examination showed a partial paraplegia, most marked in the extensors, with foot drop, absence of knee-jerks, anesthesia dolorosa of the feet and legs, delayed sensations, and pain on pressure over the nerve trunks. He recovered except for severe pains in his lower limbs, and at the end of three years presented the ordinary clinical picture of tabes.

The explanation of this alleged etiologic relationship of alcohol to tabes is assumed to be found in the well-known toxic effect of alcohol on the nervous system, and its also well-known power to produce vascular disease. Besides this, alcohol also appears to have a select-

ive action on the co-ordinating structures, as is well shown, not only in acute intoxication, but also in those cases which bear the name of pseudo-tabes or alcoholic tabes.

The method by which exposure to cold and wet might act as a producing cause for tabes is no more clear than the method by which it acts to produce other diseased conditions. The only case of this kind which has come under my observation was one in which the exposure first produced a neuritis which seemed to secondarily involve the cord.

CASE 9.—Male, aged 67, a pastry cook, seen in Kings County Hospital. He gave history of two previous attacks, each of which occurred after exposure when overheated. The first occurred nineteen years before, and involved both legs, and the second one occurred one year later and also involved the arms. The present attack was of nine months' duration. Examination showed a well-marked quadriplegia, with foot and wrist drop, diminished knee-jerks, anesthesia dolorosa of the extremities, tenderness over the nerve trunks, and edema of the feet. The condition slowly improved, but at the same time he developed lightning pains, attacks of diplopia, and occasional retention of urine. By the end of three years he presented the ordinary picture of tabes, of which he died, and which diagnosis was confirmed by an autopsy.

The remaining alleged etiologic factors may be divided into three groups: 1, Toxins formed in the body as the result of some contagious disease; 2, toxins formed as a result of perverted metabolism; and 3, those factors which act by lowering the general vitality.

The first two groups may be considered together, for in both we are dealing with the relationship of a toxin to the nervous system. If we admit syphilis and alcohol as causes for tabes, it appears that we are now dealing with similar poisons, and that there is no substantial grounds for denial that other similar poisons might not act in the same manner. All these substances are known to be able to produce degeneration of the peripheral neurons, which may secondarily involve the cord, and also degeneration of the arteries. This contention is further supported by a recently reported case of Herzog, in which a tabetic condition followed a myelitis secondary to gonorrhea; and if the observations of Fulton as to the preceding digestive disturbances are correct, it would account for some of the cases in which we are unable to assign an etiologic factor. The etiologic relationship of the factor of the third group, such as sexual excess, prolonged labors and excessive hemorrhages, can only be explained on the theory that any cause in which the vitality is sufficiently reduced to produce degeneration of the neurons would, from the anatomic facts already cited, first show themselves in the posterior columns of the cord. This explanation, however, does not account for the fact that while these causes are very common, tabes ascribed to these causes is exceedingly rare.

To sum up, then, it appears from our present knowledge of the etiology of tabes dorsalis, that the disease can be as clearly attributed to other causes as to syphilis.

The "Goryous" Fourth.—Is it not about time to ask what, if anything, has been done, or will be done, to prevent the destruction of another four and a half hundred children following the next glorious and gory Fourth? When the extent of last year's statistics became impressed on the public mind, one heard some talk of legislation to suppress the toy pistol, and it began to look as if some definite steps would be promptly taken in this urgently needed reform. What has been done?—*Cleveland Medical Journal.*

A STUDY OF THE ANATOMY, PATHOLOGY AND ETIOLOGY OF SCOLIOSIS,

ALSO PRESENTING THE SCOLIOTONE, AN APPARATUS FOR ELONGATING AND LESSENING THE ROTATION OF THE SPINE IN LATERAL CURVATURE.*

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In search for more definite etiologic factors and further pathologic conditions in scoliosis, I have found it necessary to make a thorough analysis of the spine, the various motions which it allows, and the physiologic relation which it bears to the pelvis, ribs and various muscles acting directly or indirectly on it. I also wish to say something in regard to treatment.

A STUDY OF THE ANATOMY OF THE SPINE.

The spine is a flexible column which tapers in size from below upward. In the cervical region the bodies are broader from side to side and have a tendency to limit the lateral as compared with the anteroposterior motion. Their superior and inferior surfaces are concavo-convex, and, of course, favor the motions in flexion and extension, and to a less extent from side to side, but have a tendency to limit rotation.

The articular processes in this region are oblique, and tend to permit flexion and extension and to restrict rotation; indeed, rotation can not take place without lateral bending, the greater part of all motions of the head occurring at the occipito-atlantal and atlanto-axial articulations. All of the processes in this region, both transverse and spinous, are short, which, of course, lessens the amount of leverage for rotation.

In the dorsal region the lateral and anteroposterior diameters of the bodies are about equal, their superior and inferior surfaces are flat, and have a tendency to limit flexion and extension, but favor rotation. The bodies being heart-shaped, favor oblique bending, especially as the apices of the heart-shaped bodies are forward. The articular processes are vertical, with the superior articular facets directed backward and outward, while the inferior look forward and inward; and this has a tendency also to limit flexion and extension, but to favor rotation. The spinous processes, being long and oblique and overlapping each other, limit extension, and, as they are close to the center of motion, favor rotation. The transverse processes are longer and directed outward and backward in this region, which circumstances tend greatly to favor rotation and to limit flexion and extension.

In the lumbar region the bodies are very large, and their transverse are greater than their anteroposterior diameters; this limits lateral motion more than flexion and extension, and also limits rotation. Their upper and lower surfaces are broad and flat, restricting flexion, extension and rotation. Their articular processes are vertical, and so arranged that the superior articular processes of one vertebra clasp laterally the inferior processes of the vertebra above it, making flexion and extension easy and rotation difficult. The spinous and transverse processes here are shorter than those in the dorsal region and their leverage for rotation less.

To sum up the result of this analysis, we see that the osteology in the cervical region is most conducive to flexion and extension; in the dorsal region, to rotation and lateral oblique bending, and in the lumbar region, to flexion and extension.

* Read before the American Orthopedic Association.

Now, in the dorsal region, in addition to the favorable conditions already named for rotation and lateral oblique bending, we have a most powerful set of levers, the ribs, which, through ligamentous attachments to the bodies and transverse processes of the vertebræ to the extent of one to two inches, according to the individual's size, when pulled on asymmetrically, may cause rotation and lateral oblique bending of the spinal column.

Now, while there are movable articulations between the ribs and dorsal vertebræ, their motion is limited, and when that limit is reached, they begin to act on the spine as rotators and lateral oblique benders in one-sided muscular action.

The costal cartilages being elastic and articulating with the sternum, do not limit asymmetrical positions and distortions.

The time of complete ossification of the vertebræ is not reached until the twenty-fifth or thirtieth year. The cartilaginous plates on their upper and lower surfaces do not begin to ossify until the twenty-first year, so that a constant rotation and a lateral oblique bending could readily change their shape.

In the pelvis the Y-shaped cartilages between the components of the ossa innominata begin to ossify as late as the thirteenth or fourteenth year, but the ossification of the ossa innominata is not complete until the twenty-fifth year. The sacral vertebræ unite between the eighteenth and twenty-fifth years. The sacro-iliac joints and symphysis pubis allow more play in childhood than in adult life.

Thus it will be seen how easily the pelvis can be distorted in growing persons, if faulty attitudes and irregular ossification from ill health, trauma, etc., are brought to bear.

On examination of the spine with the ligaments intact, one can easily see that the vertebral bodies are held together on all sides by a layer of inelastic ligaments, consequently no stretching of the intervertebral discs is possible, although unequal compression at any point may readily take place when force is exerted other than through the weight-bearing center. This inelastic ligamentous layer is reinforced to form the anterior and posterior common ligaments.

The elastic intervertebral discs of concentric vertical layers (and of heart shape in the dorsal region) favor compression, lateral oblique bending and rotation. The ribs being long, thin and naturally twisted, can be readily distorted by a continued disturbance of the muscular equilibrium of the trunk.

Each of the muscles of the abdomen, including the external and internal oblique, transversalis and recti, has partial attachment at one end to three or more of the eight lower ribs or their cartilages and at the other end to the pelvis. The first three are partially attached to the crest of the ilium, and with the recti are also partially attached to the os pubis; especially are their muscular portions attached to the iliac crest.

The external oblique, being the largest muscle of this group, having the most extensive bony attachment, which is the farthest from the center of the body and considering the direction in which it pulls, seems to be the most powerful for rotating and bending the spine. I think it never acts entirely independently of the muscles of the same or of the opposite side. This muscle is the only one of this group that is attached to the ribs proper, all of the others being attached to the costal cartilages. (The seven lowest costal cartilages are much longer than those higher up, and thus are capable of being more greatly distorted.)

As to the muscles of the back, I think, from my study of scoliosis, that they have been unjustly accused in the etiology of lateral curvature. The first and second layers are to support and control the movements of the shoulders. The other layers, except the iliocostalis and quadratus lumborum, are too close to the spine to have any appreciable power as rotators or even lateral benders, and they seem to be principally for erection of the spine.

PATHOLOGY.

Beely says: "We may consider the bones of the bodies as atrophied on the concave side and hypertrophied

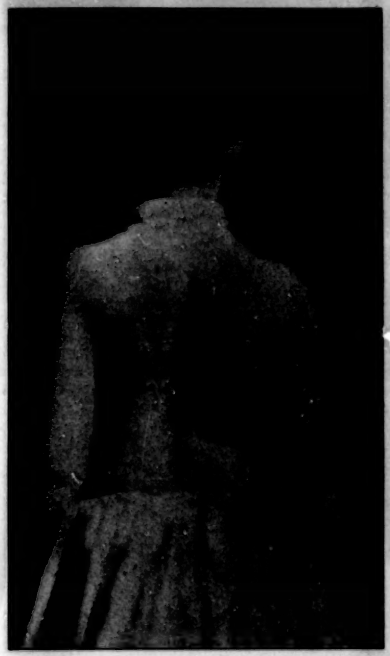

Fig. 1.—Patient showing scoliosis, rotation, lordosis and round shoulders.

on the convex, but at the same time we must not forget that the atrophy in the vertical diameter is accompanied by a hypertrophy in the horizontal, and vice versa." From his description this malformation looks as if it must have taken place before complete ossification of the bodies. To this Bradford adds adaptive shortening of the ligaments and fascia of the spine.

In addition to the wedge-shaped vertebral bodies and the contracted ligaments and fasciæ usually described by writers, I find that there is a distortion of the pelvis, the ribs and an inequality of the muscles of the abdomen. On the side of the concavity, the ribs are straighter at the posterior angles, more acutely curved anteriorly and are directed more obliquely downward than normal, while on the side of convexity there is the

opposite condition, e. g., a more acute posterior angle, a straighter anterior extremity and a more horizontal direction of the ribs.

The ilium on the side of the concavity is tilted more forward, downward and outward than normal, while on the opposite side the ilium is more vertical and its crests more horizontal.

The abdominal muscles on the side of the concavity are longer and more tense, while on the convex side these muscles are shorter and flabby. The iliocostalis and the quadratus lumborum also seem shorter and more tense on the concave side of severe scoliosis, and the normal curves of the spine are increased.

Fig. 2.—Left rotary lateral curvature in a normal individual produced chiefly by contraction of the right abdominal muscles.

Scudder has demonstrated that scoliotics are not up to the average in strength. This is easily explained when we analyze the existing conditions and see that the burden of supporting the spine is thrown mostly on one set of muscles, be they partly on one side or partly on the other. This weakened condition gives rise to the marked lordosis and stoop-shoulder (Fig. 1) accompanying these cases, the deformities being the result of the effort to maintain the equilibrium.

In the review of the literature on lateral curvature, I find a failure on the part of most writers to mention the distortion of the pelvis and ribs and the unequal length of the abdominal muscles on the two sides. McKenzie,[1] however, reports the case of a scoliotic girl, in which the right iliac crest was one inch higher than the left, and in which the left ilium was normally developed, while the right approached more nearly the vertical as in the male. These facts he attributed to the asymmetry in the development of the pelvis.

In examining the pelves of all the cases of scoliosis that have recently come under my observation, there seemed to be always an enlargement of one side. To prove this asymmetry of the bony pelvis, I made certain measurements. With the trunk bared, the shoes removed and the patient standing as nearly correctly as possible and without any undue exertion, measurements are taken as follows: 1. Between the anterior and posterior spinous processes of the ilium. 2. From the anterior superior spinous processes to the floor.

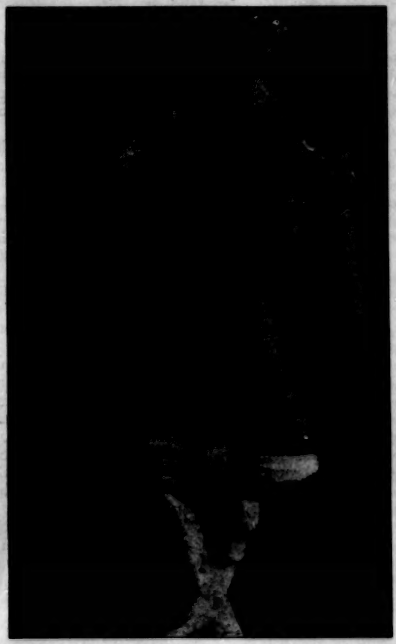

Fig. 3.—Same individual, back view, showing increased obliquity of ribs on concave side of curve, also the narrowness of that side of the back.

3. From the tip of the great trochanter to the floor. 4. From the anterior superior spinous processes to the internal malleoli. 5. Along Nélaton's line. 6. The shortest distance between crests of the ilia and the ribs on each side.

From these measurements I have found that the distance between the anterior and the posterior superior spines is about equal on the two sides; that the anterior superior spine was from one-half to three-quarters of an inch higher on the convex side when the legs are equal in length or when the leg is longer on the side of the convexity (as measured from the floor); that the distances from the anterior superior spines to the floor are nearer equal when the leg on the side of the concavity

1. Trans. of the American Orthopedic Assn., vol. vii, p. 343.

is longer; that it is impossible to get the correct length of the leg by measuring from the anterior superior spine to the internal malleoli, for they often measure the same between these points, when there is a considerable actual difference as measured from the great trochanter to the floor; that the trochanters are usually on Nélaton's line, and that the ribs are closer to the crest of the ilium on the side of the convexity.

ETIOLOGY.

Guerin claimed that scoliosis was produced by the active muscular contractions on the concave sides. Malgaigne taught that lax ligaments and weakened muscles on the convex side formed the predisposing causes. Bernard Roth thinks that the chief factors are weakness of the spinal muscles and long-continued standing or sitting in the relaxed or stooping positions. He has observed an inherited weakness of the muscles and liga-

Fig. 4.—Same individual producing curvature and rotation in the forward-bending position by contraction of same muscles as in Figures 2 and 3.

ments, associated probably with excessive softening of the bone. He writes: "Anything which weakens the muscular system tends to produce lateral curvature."

Adams believed that, in the early stages of lateral curvature, spinal muscles on both sides are, as a general rule, decidedly passive, but that as the curvature advances the muscles on the convexity are called into increased action, and serve the purpose of limiting the extent and preventing the increase of the spinal curvature.

L. A. Sayre believed that rotary lateral curvature depends entirely on spinal muscular contraction. The spinal column, he says, is held in its normal upright position by the action of the muscles situated on either side of it, and which should exactly balance each other. If for any reason one set of muscles overcomes those on the opposite sides, the spine yields and a curve is produced with its concavity toward the side on which the stronger set of muscles is situated. Drs. Sayre and Adams differ in placing the strong muscles on opposite sides of the body. Schreiber believes that, in early stages of scoliosis, there are changes in the muscles, the

Fig. 5.—Resting on trestles; lordosis and round shoulder obliterated, back flattened, rotation and curve shown.

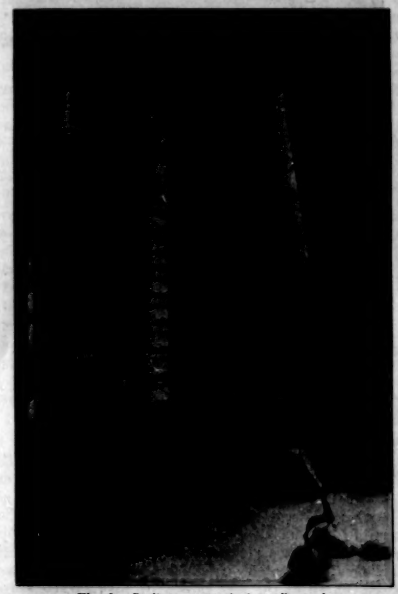

Fig. 6.—Scoliotone attached to rib stool.

muscular changes being due to long-continued stretching and disuse.

Eulenberg holds that slight continuous muscular action is necessary for the maintenance of the upright

position of the body; that this action must be equal on either side of the spine; that the most frequent cause of deviations of the spine is a disturbance of the power of the spinal muscle; that by frequently repeated passive torsion, necessary in assuming faulty positions, gradually the trunk muscles are weakened.

Lorenz sums up his opinion by the statement that anatomically, pathologically and clinically there is no foundation for a theory of a disturbed muscular antagonism, but that there is an element of general muscular weakness present in cases of lateral curvature, pure and simple, as has hitherto been assumed.

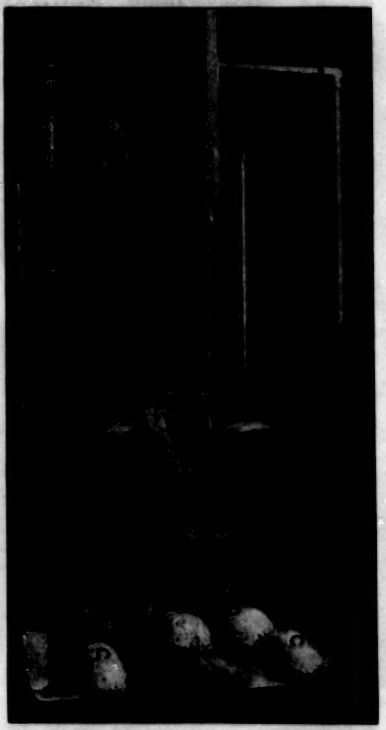

Fig. 7.—Scoliotone attached to gaspipe frame.

From my studies I am forced to hold the view that the distorted pelvis is the starting point of all cases (except those following paralysis, empyema and those accompanying Potts' disease); whether due to sitting or standing in faulty attitudes during the growing period before the bones have matured or while in a rachitic condition; unequal or irregular ossification; difference in the length of the legs caused by coxalgia, coxavara, congenital dislocation of the hip, acute inflammations, flat feet, etc.; that this is immediately followed by unequal action of the muscles of the abdomen (Fig. 2), so that those on the side, in which we find the anterior superior spine the lower, are put on the stretch, and hence act more forcibly in pulling the ribs downward, forward and straightening their angles (Fig. 3). The ribs in turn, through their long leverage on the spine, produce a dorsal concavity in it, and a rotation forward toward the same side.

On the opposite side, in which the anterior superior spine and the ribs are closer together, the abdominal muscles can not act efficiently and the ribs become more horizontal and curved at their angles (Fig. 4) and allow the bodies of vertebræ to rotate toward the convex side.

It is impossible at this time to present the full treatment antagonistic to these conditions, but I will mention a few of the most important points. Should there be an inequality in the length of the legs (as shown by the above measurements) they should be equalized, either by operation or mechanically, according to the cause. The patient should be imbued with the importance of assuming correct attitudes. Then we should establish a treatment by gymnastic exercises, jackets made over corrected casts and forcible machine correction that will tend to overcome the distorted pelvis, stretch and strengthen the weakened and shortened abdominal

Fig. 8.—Rotation and curve corrected by application of weighted strap.

muscles, which further enables us to correct the distorted ribs, lordosis, stoop-shoulders, rotation and curves.

In conclusion, I wish to present the forcible correction machine, which I have called the scoliotone. This consists of two padded adjustable trestles, on which the upper thorax and pelvis are supported, with the legs at right angles to the body (Fig. 5). By these means we in a degree overcome the lordosis and round shoulders. On the end of each trestle is a padded upright, which causes counter-pressure against the axilla and the pelvis when the weights are applied. A strap armed with hooks to hold weights passes over the convexity, being made fast to the machine on the side of the concavity of the curve. This attachment of the strap to the machine is so accomplished by hooks that it may be adjusted by sliding along on a rod, so as to pull against the greatest angle of the deformity; and in addition, the rod to which it is attached may be lowered or raised, depending on whether we desire to act more on the rotation or curve.

This machine differs from Beely's in that it has fixed supports for the thorax and pelvis, while in his machine the patient rests on the feet and elbows.

This machine may be attached to the ordinary ribstool (Fig. 6), or may have a quadrangular frame of gaspipe to support it (Fig. 7). The weights are lifted by a lever, and the amount of weight varies according to the tolerance or resistance met in the individual cases. Patients can remain in this machine for a more prolonged period than in the majority of corrective appliances, and for the past eight months I have found it a most helpful aid in the treatment of this class of cases. It overcomes lordosis, straightens the spine anteroposteriorly from end to end, strengthens the abdominal muscles, and by means of the weighted strap tends to overcome the rotation and lateral deviation (Fig. 8).

A STUDY OF GONOCOCCUS METASTASIS; WITH REPORT OF A CASE.

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Gonorrhea, as the term is ordinarily understood, is usually thought of as an affection of the urethra, or at most as a urethritis complicated by affection of the eye or joints, but the possibility of its being complicated by metastatic abscesses in various other parts of the body is not so generally kept in mind. It has only been within the last half century that practitioners as a whole have recognized the connection which exists between gonorrheal infection of the urethra and certain joint affections, and a thorough understanding of the nature of this connection has been possible for a much less time. It is generally admitted that Selle and Swediaur[1] were the first to recognize in the coincident urethritis the cause of what is now known as gonorrheal arthritis. Swediaur describes this complication of gonorrhea in his work entitled "Practical Observations on the More Obstinate Venereal Complaints," which appeared in London in 1784, reporting six or eight cases; and also in a treatise on syphilis, published in 1801.

According to John Elliottson,[2] Sir Astley Cooper, as early as 1806, gave notice of the fact that gonorrhea may be followed by painful disease of the joints. In his article on "Urethral Rheumatism and Ophthalmia," above referred to, Elliottson says: "I can remember the time when the most of the medical profession denied the occurrence of gonorrheal rheumatism, saying that a person with gonorrhea might, like any other, have rheumatism accidentally, or that a rheumatic patient might catch gonorrhea. My first knowledge of the occurrence of the disease was obtained from Sir Astley Cooper's lectures, which were delivered at St. Thomas Hospital in 1806-7 and 1807-8. How many years previously he had mentioned or seen it, I can not say."

In 1879, however, the discovery of the gonococcus by Neisser, and the observations made on it by Baumm, cleared up the question of the etiology of gonorrhea, and opened up new fields for investigation. Practitioners became divided into several schools as regards the question of gonorrheal rheumatism and gonorrheal metastasis in general. Some believed that the cause of the gonorrheal arthritis lies in the presence of the gonococcus itself in the affected joint, while others held that the arthritis, though due to the gonorrheal infection, was the result of the absorption of its toxins from the urethra. Still others asserted that the urethral lesion simply offered a port of entrance through which other pyogenic organisms could invade the body and so reach the joints or tendon sheaths. It was not long, however, before the gonococcus itself was discovered in the synovial fluid and membrane of affected joints by Petrone, Neisser, Long, Bordoni, Kamerer and Affreduzzi.

Attempts have been made at various times, notably by the earlier workers, to produce abscesses and other lesions by injections of pure cultures of the gonococcus, but with little or no success.

The writers have been able to find reported in the literature the following cases of suppurative lesions occurring during the course of gonorrhea, other than those in the urethra, in which attempts have been made to demonstrate the presence of the gonococcus as the exciting cause.

Smirnoff[3] found large numbers of gonococci in fluid obtained by puncturing an affected joint during an attack of gonorrhea. Sonnenburg[4] reported a case of caries of the hip occurring in the course of gonorrhea, in which gonococci were found on resection of the joint. Bockhart,[5] in a suppurating bubo and a periurethral abscess occurring during the course of a gonorrhea, found no gonococci, but the *Staphylococcus pyogenes aureus*. In another case he found gonococci in the pus of a kidney abscess which complicated a severe gonorrhea. Sahli[6] was able to demonstrate typical gonococci in pus corpuscles from a large abscess in the neighborhood of the knee joint.

Weichselbaum[7] found the *Streptococcus pyogenes* on the valvular vegetations in the heart of a 25-year-old man who had died from ulcerative endocarditis three weeks after the contraction of a severe gonorrhea. He also found some organisms on the valve flaps resembling in some particulars the gonococcus, although not grouped in the same way, and staining well with Gram's.

Haab[8] reports a case of a patient suffering from a severe general infection, with effusions in the knee and elbow joint and abscesses in the left axilla, and who had lost an eye from gonorrhea. In the abscess in the armpit there were found staphylococci but no gonococci.

Guyon and Janet[9] punctured the knee joint in three cases of gonorrheal arthritis, and in the seropurulent fluid were unable to find any micro-organisms either by the microscope or by various culture tests. They believed, therefore, that these cases were instances of the action of ptomains produced as a result of the growth of the gonococcus in the urethra.

In 1893, Lang and Paltauf[10] reported a case in which an abscess, associated with a teno-synovitis, occurred on the back of the hand, and in which the presence of the gonococcus was demonstrated both microscopically and by cultural methods.

Horwitz,[11] in 1893, reported a case similar to the preceding and to the one which is reported below, associated with a tendovaginitis. The gonococcus was ob-

1. London Medical Gazette, 1784.
2. London Medical Times and Gazette, June 30, 1860, vol. i, p. 642.
3. Russk. Med., 1886, iv, 487.
4. Berl. klin. Woch., 1886, 231.
5. Monatshefte f. prak. Derm., 1887, vi, 13.
6. Correspondenzbl. f. schweitzer Aerzte, 1887, xvii, 496.
7. Ziegler: Beiträge z. path. Anat. u. allg. Path., 1888, iv, 174.
8. Schweitzer Correspondenzblatt, 1889; Gesellsch. d. Aerzte in Zürich.
9. Ann. de mal. gen. urin., 1889, vii, 462.
10. Arch. f. Derm. und Syph., Wien, 1893, xxv, 330.
11. Wien. klin. Woch., vi, 59.

tained in pure culture on serum agar, and also demonstrated in cover slip preparations stained with methylene blue, being found both free and contained in the pus cells.

Bujivid,[12] in 1895, reported a case of abscess due to the presence of the gonococcus, unassociated with infection of any tendon sheath. The patient was suffering from a chronic gonorrhea, and two days after catheterization had a severe chill, after which abscesses developed in the right popliteal space, in front of the elbow, over the right external malleolus and on the inner side of the left leg. The author states that all of these had their origin in the muscles, and none in the cellular tissue or neighboring articulations. He therefore classes the gonococcus with the pus-producing organisms.

Young[13] reports five cases of subcutaneous abscesses in the course of gonorrhea, in all but one of which the gonococcus was found alone. In all of these the abscess was adjacent to the urethra or to some synovial membrane.

Deutschmann[14] found organisms which were characteristic gonococci with regard to form, size, grouping, staining reactions and cultural characteristics, in the synovial secretion of an affected knee of a child suffering from ophthalmia neonatorum.

The patient in the case studied by the writers is a woman of about 40 years of age, married, and a housewife by occupation. Her present trouble began July 25, 1903, as sharp shooting pains around the base of the right thumb and index finger, which after 24 hours became so severe that medical aid was summoned. The hand was found on examination to be slightly swollen, especially over the location of the pain. Her temperature was found to be 101 F. Any motion of the index finger was extremely painful, especially movements of the metacarpophalangeal joint. The patient's husband had been under treatment for gonorrhea during the previous month, and consequently the present trouble was suspected to be a complication of a gonorrhea which the patient had acquired from her husband; but close inquiry failed to elicit any history of such a condition. She was therefore placed on antirheumatic treatment, and the pain controlled by sedatives, but without beneficial result.

The swelling and redness became more pronounced, and August 2 an incision was made over the proximal phalanx of the index finger, both above and below, resulting in the evacuation of a small amount of purulent material. After this the temperature fell to normal, but in the course of a few days rose again, and the swelling extended to the palm and dorsum of the hand. August 16 free incisions were made into the diseased area under chloroform anesthesia, and a considerable amount of pus was evacuated. The pus cavities were curetted and washed out thoroughly with a hot carbolic solution. The subsequent treatment consisted of hot bichlorid irrigations and antiseptic dressings. Recovery was uninterrupted, but the involvement of the flexor tendon resulted in its shortening, which prevents the complete extension of the index finger. There was no ankylosis of any of the neighboring joints. This fact, together with the evident involvement of the flexor tendon, indicates that the condition was purely a tendovaginitis.

BACTERIOLOGIC INVESTIGATION.

The freely flowing pus, obtained at the second operation, was received on a sterilized platinum loop and transferred to liquefied gelatin and agar tubes (45 C.). The gelatin tubes were kept at room temperature, and the agar tubes in the incubator at 37 C., for some days, without, however, showing any growth. Unfortunately, tubes of serum agar were not at hand, and growth on this medium was not attempted. Thin spreads of pus obtained as above were made on cover glasses, dried in the air, and fixed lightly in the flame. A portion of these spreads were stained with Loeffler's methylene blue, the balance with a 1:10,000 solution of neutral red. On examination, these preparations showed the presence of groups of "biscuit-shaped" diplococci, although not in very large numbers—not more than one or two such groups to a field (1/12-inch oil immersion). Similar diplococci were also found within the cell bodies of the leucocytes, and in all respects as regards form, size, arrangement, staining reaction, and grouping were typical gonococci. They were readily decolorized by Gram's method.

Although the organism could not be cultivated on the media employed, the characteristic appearance of the flattened diplococci, the grouping, the presence of the organisms in the pus cells, the decolorization by Gram's stain, and, above all, the inability to grow on the ordinary media, on which the ordinary pus germs readily thrive—leaves no doubt that the organism in question was none other than the gonococcus of Neisser.

The fact that such metastatic abscesses, due to the gonococcus alone, can occur in various parts of the body, even in the absence of symptoms on the part of the urethra or other portions of the genito-urinary tract, being established, the importance of routine microscopic examinations of pus from such abscesses, especially those connected with tendon sheaths, is apparent. A patient such as the above becomes an especial danger, not only to herself, but to those with whom she is associated, unless the true condition is understood. It is readily seen that the liability of such a patient to contract a gonorrheal ophthalmia or to infect the eyes of others, is infinitely greater than when the disease is localized in the urethra. The transference of purulent matter to the eyes of such a patient or to those of her young children, from an abscess on her hand, is indeed more of a probability than a possibility, unless especial precautions are taken to prevent.

Aside from the danger to which the ignorance of such a condition subjects the patient and her associates, the clinical discovery of the gonococcus in such an abscess affords a clear indication as to subsequent treatment. It is probable that in all cases the organisms growing in such metastatic abscesses have migrated from the mucous membrane of the urethra, this locality being, par excellence, the most suited for their growth. It is also probable that here they will be found in greatest numbers, whether the patient presents symptoms of urethritis or not. Proper treatment directed to the urethral condition should, therefore, be employed in all cases. First, for the purpose of curing the primary condition; and, second, as a prophylactic measure against other possible metastatic complications, endocarditis or synovitis, and especially to forestall the more serious dangers to which every sufferer from a chronic gonorrhea is liable.

12. Centrabl. f. Bac. u. Parasit., Jena, 1895, xviii, 435.
13. Jour. of Cut. and Gen. Urin. Dis., 1900, xviii, 241.
14. V. Graefe's Arch. f. Ophthal., xxxvi, 1.

TREATMENT OF TYPHOID PERFORATIONS.

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While the modern methods of treatment by the general practitioner have done much to reduce the percentage of deaths due to typhoid fever, the rôle played by the surgeon in lessening the death rate occupies a conspicuous place.

The tubbing and proper feeding do much to keep down temperature and maintain strength, but no medicinal agents nor the most careful management can overcome the great danger of intestinal perforation by ulcer-

ation. From a careful perusal of the literature and consultation of authorities we find that about 3 per cent. of all cases present this most dangerous complication, i. e., it is the cause of one-fourth to one-third of all deaths in typhoid fever.

In 3,686 cases, Schultz found peritonitis from perforation in 1.2 per cent., Liebermeister in over 2,000 in 1.3 per cent., while Hölscher found it in 6 per cent. in 2,000 cases, and Murchison in 11.38 per cent. in 1,721 cases. Fitz shows the mortality to be 6.58 per cent. from perforation in 4,680 cases tabulated up to 1891. In more recent times, since the subject has been more thoroughly studied, we find that Armstrong reports 932 cases, with 3.66 per cent. perforations, and McCrea and Mitchell cite 8 cases occurring in 275 patients. This, in comparison with the present-day mortality, would mean a very large proportion of deaths in typhoid fever due to perforation, for under former methods of treatment these cases practically all died and to-day the death rate from this cause continues large.

In 1898, Keen reported a total of 83 cases of typhoid perforations operated on with 19.3 per cent. recoveries, to which a year later, he added 47 cases with 28 per cent. recoveries. This work was largely done in this country, due probably to the doubt as to the efficacy and advisability of operation existing in the minds of the European surgeons, as expressed by Eulenberg in his paper in 1891.

In Keen's monograph, which caused the profession to awaken to this subject, he says that the accident is a very rare one in children, but Elsberg, in a very recent communication, thinks it almost as frequent as in the adult. Basing the frequency of cases in children as seen by the surgeon, i. e., 48 cases in a total of 315, we must conclude that, though not occurring as often, it can not be considered as an infrequent complication in children. We would especially call attention to these figures, in view of the fact that typhoid fever is said to be not only much more seldom seen in children, but that it also runs a far milder and shorter course. It may be of interest to know that one of Chevalier's cases was in an infant of 11 months of age, and that this author, in a large experience with the young in the hospitals of Paris, believes it to be a source of great danger in them.

Recognizing these facts, we should then be constantly on the alert for the very first symptoms indicative of perforation. It may take place at almost any time, even during the first week of illness, though most often after the second week. This is contrary to the older teachings and also the opinions which are held by many practitioners, it being popularly thought that the end of the third and beginning of the fourth week of illness is the time when this danger may be expected. It is not always an easy matter to determine the date of the illness, even after careful inquiry, as many patients are ill for a variable time before a physician is consulted or before they take to bed. In some of the reported cases the signs of perforation were really the first warning the patients had that they were very ill and were also the occasion for consulting medical advice.

It is also a mistake to believe that after the fourth week this danger is passed, for as many cases have been reported as taking place in the tenth as in the first week. Of 193 cases of perforation, tabulated by Fitz, the time of occurrence was as follows:

First week 4, 2d week 32, 3d week 48, 4th week 42, 5th week 27, 6th week 21, 7th week 5, 8th week 3, 9th week 2, 10th week 4, 11th week 3, 12th week 1, 16th week 1.

SEAT OF PERFORATION.

In 85 to 90 per cent. of cases perforation takes place in the last twenty inches of the ileum, though it may occur in the colon, and several cases of appendiceal ulceration and perforation have been recorded. The sigmoid may be the seat of the opening or the jejunum, and in the table of Fitz above quoted, it occurred four times in a Meckel's diverticulum.

SYMPTOMS AND DIAGNOSIS.

No case of typhoid should be so mild as to cause us to lose sight of this dreaded accident. We believe that the symptoms are such that a diagnosis can be made correctly in the majority of cases, if one is on the lookout in the least. These symptoms are those due to the insult to the peritoneum, and are not dependent on the perforation *per se*. The classical signs are pain, rigidity, tenderness. With these we have thoracic instead of abdominal respiration, which means fixation of the diaphragm, inhibited peristalsis, absence of liver dullness, tympany, vomiting, increase in blood pressure as shown by the sphygmomanometer in all cases, leucocytosis, increased pulse rate followed by rising temperature and altered facial expression and shock. Let us very briefly analyze the symptoms:

Pain is not a necessary accompaniment of typhoid, and while it may be present during the course of the disease, it is not continuous or persistent, but is temporary. Nor is the onset sudden as a rule, unless as an indication of some severe and dangerous complication. Ordinarily it is relieved by an enema. On the contrary, the pain of perforation is sudden and may follow a stool or manipulation of the patient. It begins in the hypogastric, though more often in the right iliac region, and spreads thence gradually over the entire abdomen. Not infrequently a stool soon follows, giving some temporary, slight relief. The pain may increase and be continuous or may after a time cease entirely, which means that a general toxemia has supervened. Even in the smallest pin-hole openings this pain is present. Persistence of pain without the slightest evidence of shock, if accompanied by rigidity, is almost sure to mean perforation. Acute or sudden or continuous pain should always be a danger signal and cause the attendant to redouble his care and vigilance, making more frequent visits and getting into touch with a surgeon so as to be prepared for the emergency. It may denote, in the absence of perforation itself, an ulceration through to the serous coat of the bowel and the approach or early possibility of extension through all the coats. It is the peritoneal layer alone which possesses nerves of sensation, hence the pain at this stage. Ulceration, no matter how extensive so long as the peritoneal coat is uninvolved, causes no pain.

Rigidity is one of the most valuable signs of peritoneal damage we have. It is noticeable almost at the beginning and may be present even before the perforation. Just as pain may denote an impending perforation, so may rigidity be found before the damage has extended through the peritoneal coat of the bowel. Localized at first to the affected area, it soon spreads over the entire abdomen, indicating spread of infective material. Unlike pain, which may be well borne and not cause much complaint in certain stolid individuals or in those profoundly septic or which may grow less and even cease as toxemia advances, rigidity is constantly present. The patient can not voluntarily overcome it. Its presence in the diaphragmatic muscle

causes the alteration in type of respiration from abdominal to costal.

Tenderness usually exists most markedly in the right iliac region, i. e., over the seat of perforation, and over the now most violently affected serosa. It soon becomes more or less general, but may be slight over the abdomen, except in the region above mentioned or the hypogastric region. Osler says the attendant must be constantly on the watch for the sudden occurrence of the above three symptoms.

Inhibited peristalsis is, according to Taylor, a very important symptom. Not infrequently we find, however, that the inhibition has been preceded by a very active peristalsis immediately following the perforation as indicated by the two or three copious evacuations, which at times follow the onset of the very earliest manifestation of pain. These stools may contain blood from the perforating ulcer. That inhibition follows we can readily understand, and as the infection progresses, it becomes complete, resulting in paresis, which, in my opinion, indicates absolute hopelessness of recovery in this as well as in other peritoneal involvements.

Tympany and absence of liver dullness with pain, are, to our mind, the only really indicative symptoms of the perforation *per se*, all other symptoms being those of the infection rapidly following the peritoneal insult. This symptom, however, is so rarely present early that it is difficult to see how one is to differentiate the symptoms of the perforation from those of the peritonitis, which latter are the ones on which we depend for a diagnosis. Escape of gas is apt to take place so gradually that it is hardly a symptom to wait for before making a diagnosis, notwithstanding the fact that its presence is almost pathognomonic. I have seen cases with little tympany even hours after the perforation had occurred.

Besides the above local symptoms referable to the abdomen or seat of lesion, we have other symptoms serving to corroborate the diagnosis. We should not lay too much stress on them, as the local symptoms are, without these, enough on which to place the strongest reliance and base a sufficiently strong presumption.

Vomiting may or may not be present; in fact, it is not a symptom in more than 7 to 10 per cent. of the cases reported.

Blood pressure, measured by the sphygmomanometer, according to the reports of Crile and the Johns Hopkins School, furnishes a most valuable means of diagnosis. The cases are, of course, too few as yet to say with absolute certainty what the exact value of a rapid rise in blood pressure as thus indicated is, but from my experience I am inclined to believe this instrument will or should come into as general use as the stethoscope.

Crile, in five cases at Lakeside, made a diagnosis by this means, all verified by autopsy or operation. In one case a second perforation was also indicated by a rapid rise in blood pressure. With subsidence of peritonitis the blood pressure fell rapidly to normal again.

Leucocytosis has been shown to be of value only in connection with the other symptoms. This is probably accounted for by the rapid outpouring of leucocytes into the peritoneal cavity as a result of the infection. As McCrea and Mitchell have shown, even with other symptoms it may be misleading, two of their cases with this evidence and other symptoms presenting no perforation at operation. Armstrong, with an experience of 34 operated cases, says it is not to be relied on. Elsberg says: "It can be used only with circumspection as a diagnostic symptom, while the absence of a leucocytosis does not exclude the possibility of a perforation."

Pulse and temperature, of all the signs of perforation, are the least valuable. The character of the pulse is a very valuable sign, but the rate is hardly to be depended on. Like temperature, it means very little in many instances, and both are so frequently misleading that no reliance can be placed in either as even fairly constant from a diagnostic standpoint.

Facial expression may not be altered, except to indicate pain. Not infrequently, however, the expression is pinched, anxious and indicative of a very grave change in the patient's condition. When there is much shock this is especially true, and we have the expression so graphically described by Warren in this condition, when, as Gross says, the "machinery of life has been rudely unhinged."

Shock may be very marked or absent or so slight as to pass unnoticed. When marked it is a symptom of value only as indicating a most desperate case. I wish here again to draw attention to shock as a symptom not of perforation *per se*, but rather of a rapid and profound poisoning. The text-books lay entirely too much stress on this symptom of perforation. In my own experience in the one case operated on it was never a symptom, and I have seen other cases in which it was entirely absent. Without bleeding, this symptom is one either of rapid sepsis, with consequent obstruction or of early impending death. Notwithstanding this, it is not an indication for delay in treatment.

Of all these symptoms, the most important are pain, tenderness and rigidity.

TREATMENT.

To obtain the best results, the operation should be done promptly within certainly the first twenty-four hours; better still, as soon as a probable diagnosis is made. Of the six recoveries reported by Armstrong, five were operated on within thirteen hours after the first symptom, and Cushing believes that with careful watching and early diagnosis, 50 per cent. to 60 per cent. should be saved. In other words, we should operate if possible before the peritonitis becomes too general and too virulent. As lives have been saved, however, even in very late cases, who can say when a patient is beyond hope of recovery? One life in 100 or even in 1,000 is worth saving.

Some will say that cases may get well without operation. True, but as Fitz says: "Since perforation may take place without any suggestive symptoms, and since suggestive, even so-called characteristic symptoms, may occur without any perforation having taken place, it must be admitted that recovery from such symptoms is no satisfactory evidence of recovery from perforation."

It is also true that sometimes we may make mistakes and find no perforation, but we must remember that a peritonitis may exist without perforation which may demand celiotomy to rescue the patient. Murphy has especially called attention to this and reported several cases. In these, while there is no perforation, the ulceration has extended through all the coats except the serosa, and we have the bacteria finding their way through this thin wall into the peritoneal cavity. The symptomatology may then be precisely the same as in perforation; in fact, exclusive of the hole in the bowel, the pathology and outcome are similar. Chevalier says: "Operate even when the diagnosis is not fully decided,"

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190

which means, of course, to operate promptly. Do not wait for all the positive and confirmatory evidences of the trouble or the golden opportunity will have been lost. Nor should we be too greatly perturbed about shock when present, as it is in these cases no indication for delay. Some of the best results have been in patients operated on in shock.

As to the technic of the operation, I would only say, do not try to do too much. Do not lose time in useless tinkering and fussing. Do the work quickly—best through an incision in the right linea semilunaris—close the opening in the bowel, and be sure to amply drain the cavity. If the opening is not readily found, let it be and drain extensively. To prolong the operation needlessly is bad surgery. If the patient is a bad subject for a general anesthesia, use a local anesthetic.

Escher has recommended stitching the edges of the intestinal opening to the parietal incision, and Le Compte advises damming off the infected area, particularly when there are multiple openings near each other, with a gauze wall. An artificial anus presupposes only one perforation. The mattress Lembert suture is looked on as the best. Extensive flushing and leaving some of the normal saline solution in the belly, with of course drainage, is, I believe, the preferable way to overcome the peritonitis, although Finney and others continue to advise dry mopping of all infected areas.

In conclusion, I wish to read the following table of Elsberg and some additional cases I have found in the literature bringing the reported cases to date:

REPORTED CASES OF OPERATION TO APRIL, 1903.

	Adults.	Children.	Total.
Cases operated on	264	25	289
Recoveries	59 (22.4%)	16 (64%)	75 (25.9%)
Deaths	205	9	214 (74.1%)

ADDITIONAL CASES.

	Cases.	Recoveries.
Armstrong	8	5
Crile	4*	2
Chevalier and other Parisian surgeons	13	5
Frank	1	0
Harte	13	3
Méry	1	0
Total	40	15 37.5%

*One unoperated.

Of these last, 14 are reported as children with 5 recoveries, or 35.57 per cent.; 26 adults, 10 recoveries, or 38.46 per cent.

My own case was as follows:

A man, 32 years of age, in the third week of typhoid fever, living in the country, was seized with a sharp pain in the right iliac fossa, which disappeared after copious movement of the bowels. Two hours later his temperature became very slightly subnormal, and continued so or normal for twenty-four hours. When seen by me 60 hours later his temperature was slightly above 99 F., pulse between 86 and 90, though it rapidly rose to 112. There had been no vomiting, and distension of the abdomen had been present for only a short time after the sudden pain. The patient presented a good appearance, without pain or tenderness, and was not depressed. Tympany was present over the entire abdomen as far as the fifth intercostal space, with marked rigidity and absence of liver dullness. The pulse was hard and characteristic of peritonitis. Diagnosis of perforation was made, with prognosis of death, with or without operation. The patient asked that he be given the slight chance by operation. On opening the abdomen it was found filled with pus and fecal matter and the intestines distended above a point about eighteen inches above the perforation, below this point the intestine was flat. The perforation was closed with difficulty, the cavity washed out and five drains inserted. The patient was put to bed in fairly good condition, and next morning had a pulse of 130, no vomiting or pain. He died on the second day.

CONCLUSIONS.

From the foregoing we can make the following summary:

1. Perforations are to be expected in about 2.5 per cent. of all cases of typhoid fever.

2. Prompt surgical intervention is the best and only logical treatment.

3. Early diagnosis is most desirable, and will be the means of greatly reducing the mortality, as 55 to 60 per cent. would recover.

4. Diagnosis, sufficiently early to achieve these results, can only be made by careful watching, treating all cases as serious ones and a proper interpretation of the early, even the preperforative, symptoms, the suggestions of Cushing as to this stage being of value. At the first indication of this stage have the surgeon in consultation and be prepared to operate.

5. The sphygmomanometer should come into general use as an important aid to diagnosis.

6. More cases die from delay than from errors in surgical technic. Therefore, in doubtful cases, though a mistake may be made and no perforation found, operate.

7. No case, unless dying, is so desperate as to be beyond some hope of saving. So in operating, lose no time and be sure to drain.

8. Get into the abdomen quickly and get out more quickly.

(NOTE.)—Since this paper was written, Dr. W. D. Haggard of Nashville has reported, in a paper read before the American Association of Obstetricians and Gynecologists, three cases, with three recoveries.—L. F. (See THE JOURNAL A. M. A., Oct. 17, 1903, p. 979.)

A SIMPLE, ACCURATE AND RAPID METHOD OF LOCALIZING FOREIGN BODIES IN THE ORBIT.

VARD H. HULEN, A.M., M.D.
SAN FRANCISCO.

When the eye has been injured and there is a possibility that a foreign body remains, the very first procedure is to determine, if possible, the exact location of the object in reference to the eye. If the foreign body can not be seen with the ophthalmoscope we must resort to the *x*-ray, and should the result of such examination be positive, we then proceed to localization before any means whatsoever are tried for its removal.

As the vast majority of the foreign bodies in eye cases (iron, steel, copper, lead, glass, etc.) are revealed by the Roentgen ray, we can usually be certain of a positive result if the foreign body be present. The circumstances attending the injury often determine the probable substance of the foreign matter present. Fortunately most of such injuries to the eye are produced by pieces of iron or steel, and as these objects are attracted by a magnet we have thus an invaluable method for their removal.

Since the advent of the incomparable giant magnet of Haab, great advancement has been made in the successful treatment of these cases, but I do not at all agree with those who advocate using the Haab magnet in an attempt to determine whether or not an eye contains such a foreign body. I do not consider it good surgery or good sense to attempt to remove a piece of steel from the eye before its exact location is known. This being so, it is most desirable to have a method of localization

that is simple, that is quickly used and that is absolutely accurate.

A number of methods of localization have been advocated, but the only one to be recommended, with which I am familiar, is the method of Makenzie Davidson. In London over two years ago I had the pleasure of seeing Mr. Davidson repeatedly apply his method

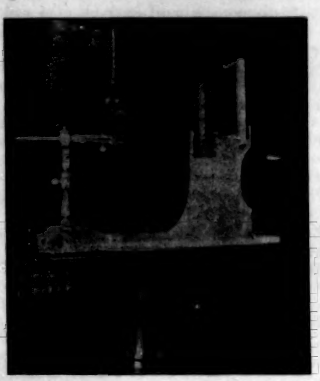

Figure 1.

with excellent results. But his method requires considerable special apparatus, a good deal of time, and I find the exact details are not easy to carry in the mind. For these reasons I sought a simpler and more rapid method, and yet one equally as accurate. Since August, 1902, I have employed a method of localization which has fulfilled all the requirements. With me it is original,

Figure 2.

but I do not suggest it as a new method, for not a few things in medicine presented as new later are proven otherwise.

My "localizer" (Fig. 1) can be made by any carpenter, and the photograph presented is explanatory of its mechanism. As the head must be absolutely immovable, I have the patient hold her position firmly with her teeth, in preference to Makenzie Davidson's head fixation (Fig. 2).

The method of procedure is as follows: A piece of lead of suitable size and shape is securely fastened with adhesive plaster to the margin of the lower lid of the injured eye directly under the center of the pupil. (This marker might be fastened in the conjunctiva.) Then the distance from the upper extremity of this "marker" to the center of the cornea and also the distance the marker is anteriorly or posteriorly to the apex of the cornea is taken and recorded. A Crookes tube is next adjusted vertically in the holder of the localizer so that the luminous point of the anode and the point where the wires cross and the V-shaped sight are in a horizontal line. Then the distance from the anode to the cross wires is measured and recorded. The patient is placed in position, a photographic plate is put in the frame and Photograph 1 is taken. The patient remains in the same position, but the tube is raised a definite distance,

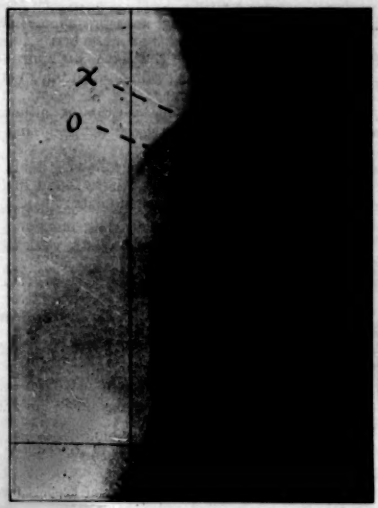

Fig. 3.—Case 1. Photograph 1. X. Foreign body. O. Point of marker. In this photograph, as also in Figures 4, 9 and 10, the foreign body shadow has been marked over to make it more clear.

usually three inches, and Photograph 2 is taken, and both pictures are sent to the dark room to be developed. The marker on the patient's lid is again inspected to be sure it has not shifted its position since first measured.

With these two plates and the accurate measurements one can quickly determine the exact position the foreign body occupies in the orbit.

On a sheet of drawing paper make two vertical lines, the distance between them being that recorded for the distance between the anode and cross wires. Cross each of these lines near the bottom by a horizontal line, and mark the point of crossing of left line "1." Then mark a point "2" on this left vertical line, the same distance above as the tube was displaced vertically when taking the second picture. Then in Photograph 1 measure the vertical distance from the shadow of the *horizontal* wire to the upper extremity of the shadow of the marker, and

on the right vertical line in the diagram beginning at the point crossed by horizontal line measure vertically this distance, designating that point "0, 1." In the same way measure and mark the vertical distance from shadow of horizontal wire to shadow of foreign body "X, 1." Now take Photograph 2, measure and mark shadows of the foreign body and marker on same vertical line as with Photograph 1, designating the point of the foreign body "X, 2," and that of the marker "0, 2." Then connect by a continuous straight line point "1" on left vertical line with point "X, 1," on right vertical line, also by a broken line with point "0. 1"; connect point "2" in a similar way to "X, 2" and "0.2."

It is evident that the point where the *continuous* lines cross represents the location of the "marker," and that the point where the *broken* lines cross is the exact location of the foreign body in the vertical plane. As the relation between the eye and the marker is known, draw schematically an eye according to its anatomic

Fig. 4.—Case 1. Position 2.

measurements in its correct position, using the vertical measurement previously made from the center of the cornea to the upper extremity of the marker. The location of the foreign body to the eye in the vertical and lateral meridians is thus made plain by our diagram.

Now for the upper part of the figure. Mark a point on the left vertical line "1" and also a short line at the corresponding horizontal point on the right vertical line. Then in Photograph 1 measure the distance from the shadow of the *vertical* wire to the shadow of the "marker" and mark the point of that measurement above the crossing of the short line "0′, 1′"; also measure the distance from the shadow of the vertical wire to the shadow of the foreign body, and as above described, mark it "X′ 1′." Connect point "1" by a continuous line to "0,′ 1′" and by a broken line "X′, 1′." Then erect across the paper a perpendicular continuous line through the point corresponding to the marker and a broken perpendicular line through the point corresponding to the foreign body in the lower part of the diagram. Again it is evident that the points where these lines cross the above lines will mark the exact location of the marker and the foreign body in the horizontal plane. Again draw the eye in its correct relationship to the "marker," using the other measurement from the marker to the apex of the cornea. Thus the location of the foreign body in the relation to the eye in its horizontal meridian is revealed and the localization is complete and perfect.

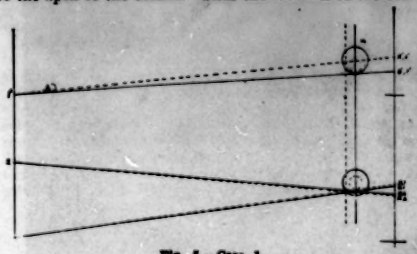

Fig. 5.—Case 1.

I need hardly say that after the idea has been grasped, one can draw this complete diagram unhesitatingly in far less time than it takes to read the description of how it is done.

Three foreign body cases are chosen from my records and reported for their interesting points, as well as to illustrate this method of localization.

Fig. 6.—Case 2. Photograph 1.

CASE 1.—Male, aged 43 years, expert machinist. Fourteen years ago he was struck over the right eye causing loss of vision of this eye from traumatic cataract. The sight of the left eye was perfect until Aug. 14, 1903, when a flying chip of cast iron from a neighboring workman's chisel injured it. He

placed himself in the care of an oculist within an hour after receiving the injury. Not much pain followed, and he was able to perform his toilet, but vision was rapidly lost. His oculist reported that at the first examination there was a small wound at the sclerocorneal margin below and to the temporal side, and a clot of blood or something in the vitreous to the nasal side. The patient did not believe the iron had entered the eye

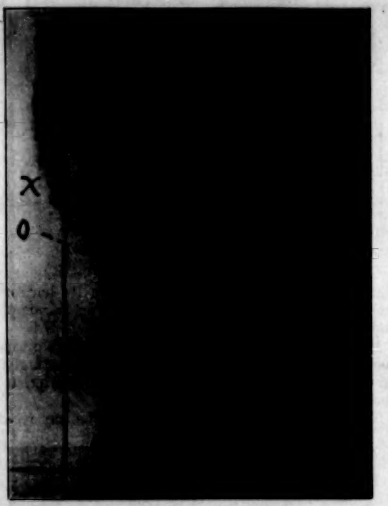

Fig. 7.—Case 2. Photograph 2.

at all. A small magnet was applied and later the Haab magnet was tried repeatedly without any result or any sensation of pain or drawing feeling about the eye. Very slight reaction followed the injury, but he was kept under daily observation.

Four months later the patient consulted me. The left eye was free from pain and inflammation, a traumatic cataract obscured the pupil, a very insignificant scar marked the site of

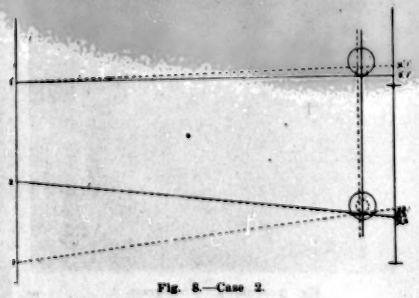

Fig. 8.—Case 2.

the injury. Vision $=1/\infty$. Projection faulty. T.$=-1/2$. An α-ray examination showed the presence of a foreign body in the orbit.

Localization by the method described above revealed the fact that the piece of iron was in the inner and lower part of the wall of the eye. As this condition seemed improbable I felt that some slight error had been made in my measurements, and that probably the iron was inside the eye, resting on the wall at the site shown. Then I tried my giant magnet again and again with a negative result. The patient was sent to the hospital, and next day, under chloroform, an incision, guided by the localization, was made with a cataract knife, cutting into the iron, but it was even then found impracticable to remove it with the magnet or forceps, and as the eye was hopelessly blind in any case, enucleation was done. Thus I became possessed of a most interesting and beautiful specimen, for the small elongated piece of iron was found to be in the wall of the globe, one point without and the other point within the eye. My localization had been absolutely accurate.

Subsequently the cataract was successfully removed from the right eye.

This case proves that the giant magnet is not at all a reliable test in the presence of an injury to the eye from iron or steel, for its negative result misled the patient's former surgical adviser, who counseled a let-alone plan of treatment.

CASE 2.—Male, aged 22 years, logger in lumber camp; referred to me by an oculist confrère with the history that on

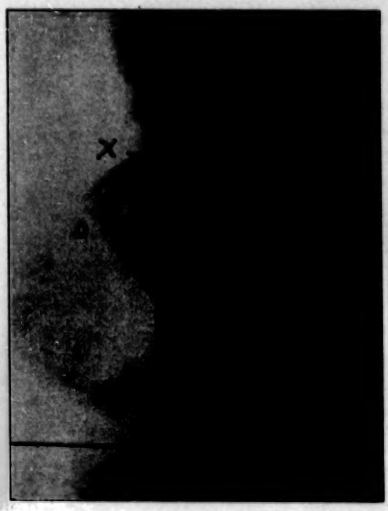

Fig. 9.—Case 3. Photograph 1.

March 17, 1903, while trimming a recently spliced wire rope with a hatchet, his left eye was injured by a flying particle. He was treated by a local surgeon until the eye became quiet. A month after the injury he had a severe pain in the other (right) eye, which led him to seek advice in San Francisco.

My examination, April 30, 1903, showed the right eye to be perfectly normal. In the left eye there was a small corneal opacity at upper edge of pupil, traumatic cataract, posterior synechia at point corresponding to corneal macula. Vision $=3/200$. Tension normal, eye perfectly quiet.

The α-ray revealed a small foreign body in the orbit. The repeated applications of the Haab magnet resulted negatively, as in Case 1.

Next day localization showed the particle to be in the eye below and slightly to the nasal side, probably resting in the posterior surface of the swollen lens. Not knowing the conditions I again applied the giant magnet, having the patient turn the eye as strongly upward as possible. After a moment he complained of pain; reducing the strength of the current I directed the patient to look straight ahead and then down, and

the piece of steel entered the anterior chamber. A small section was made in the cornea and the foreign body was easily extracted. No reaction or change of vision followed the operation.

This case again shows the unreliability of the Haab magnet to reveal the presence of a piece of steel in the eye; it shows the accuracy of this method of localization, but—what is here most important—the exact loca-

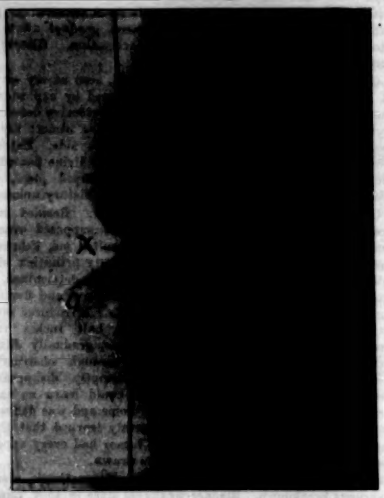

Fig. 10.—Case 3. Photograph 2.

tion of the foreign body enabled me to remove it successfully with the Haab magnet, while before localization I failed.

CASE 3.—Male, aged 36 years, blacksmith. Aug. 1, 1903, while striking, a flying piece from the sledge hammer struck him in the left eye, destroying the sight instantly. Aug. 3, 1903, the patient was brought to my office by his oculist to try the effect of the giant magnet. Examination showed a penetrating wound of the cornea extending from the center down-

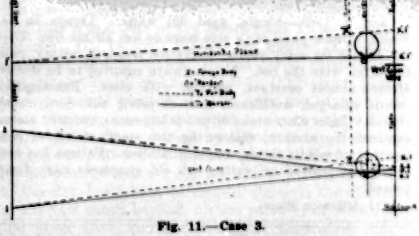

Fig. 11.—Case 3.

ward and slightly outward 8 mm., a corresponding injury to the iris and the lens, no reflex from fundus. Vision = 0, globe soft.

The result of application of the Haab magnet to the eye in various positions was entirely negative.

An *x*-ray photograph revealed the presence of a large foreign body in the orbit. Localization by the method detailed above showed the foreign body to be entirely outside the eye (see diagram). Although it was not necessary, enucleation was done by the oculist in charge of the case as the eye was hopelessly blind, and the healing would require the patient's detention in the hospital, etc. Thus we obtained the proof that my localization was correct; the wound of exit of the foreign body was found in the posterior and inner wall of the globe. Both the wounds of entrance and exit were as clean cut as if made with a sharp knife. The axis of one wound being almost at a right angle to that of the other, showed that the foreign body twisted on itself in its passage through the eye. The wall of the eye was unusually thin.

This case again shows the necessity of exact localization, for it seemed quite improbable under the circumstances that so large an object would go entirely through the eye.

Because of the known position of the foreign body in the orbit the eye could have remained with perfect safety had a cosmetic result been of more importance than time and expense. The piece of steel in this case was 8 mm. in one diameter by 5 mm. in the other. We knew the foreign body to be quite thin from the faintness of the shadow in the *x*-ray picture, as well as from the clean-cut lines of the wounds.

751 Sutter Street.

STRICTURES OF THE FEMALE URETHRA.

WITH REPORT OF CASES.*

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Strictures of the female urethra are narrowings of the intima of the canal of a greater or less degree, which impede or prevent the passage of the urine by the natural course from the bladder. They are congenital or acquired, single or multiple, and may be classified as stenosis or obstructive, atresia or retentive, atresia, nonretentive, when the urethra becomes occluded from disuse associated with vesicovaginal fistula and atresia with urine discharged through the umbilicus via a patulous urachus. Various modifications of these varieties are found associated with malformation of the bladder.

Congenital atresiæ are usually located at the neck of the bladder, or in the upper third of the urethra, but obliteration of the entire canal, or its absence, has been noted. Acquired cases, if traumatic, are situated at or near the site of the injury, while, if non-traumatic, they are found usually in the middle third of the urethra.

Statistics are lacking as to frequency. The few authors who mention the condition agree that it is uncommon. About twelve years ago I read a paper before a Washington society, reporting a case of acquired stenosis, with retention, calling attention to the absence of statistics, and the large number of standard authors who made no mention of the disease. Some recent text-books mention the subject only casually, while others do not mention it at all.

The causes are congenital malformation, traumatic, internal or external, associated with abnormal, prolonged or instrumental labors. Injuries of the genitals from burns, scalds, falls, cicatrices following operations and contractions from free use of caustics. Inflammation and infection from gonorrhea, urethral chancre and chancroid, septic instruments, urethral masturbation, tumors and adhesion bands in vagina. Tumors within the urethra are said never to cause stenosis or atresia.

The pathologic alterations resulting from congenital malformation, inflammation, infection, pressure and trauma, may present any degree of structural change

* Read before the Tri-State Medical Association of the Carolinas and Virginia, Danville, Va.

from obliteration or occlusion of a portion, or the entire urethra with fistula and bladder ureter or kidney complication; to the simplest submucous connective tissue infiltration, restricting only slightly the lumen or elasticity of the canal.

The symptoms of acquired stenosis resemble those of cystitis, frequent, scanty, painful or difficult urination or retention. In some instances the urine is normal, leading to error in diagnosis by directing suspicion to surrounding organs, the tubes, ovaries or uterus especially when displacement exists. The urine may contain blood, pus or mucus, and hydronephrosis may result from retention. Congenital atresia without fistula presents unmistakable physical signs of retention or distention. Atresia co-existing with fistula or other malformations has no distinctive symptom, except the closed canal.

Diagnosis is based on discovery of stenosis or atresia by the use of olive-pointed sounds, bougies or metal catheters. The condition of urine, even in advanced cases, is often misleading. Infrequency of the disease causes delay in diagnosis; therefore, no physical examination in "disease of women" should be considered complete until the catheter has been passed into the bladder.

Prognosis is favorable in acquired stenosis or atresia, except where advanced bladder or kidney disease exists from infection or distention. In congenital atresia, it will depend on the complications in individual cases.

Treatment of acquired stenosis or atresia consists in gradual or rapid dilatation with olive-pointed sounds, bougies, metal catheters, urethral or uterine dilators, and in some cases, cutting or incision. Constitutional medication should invariably follow surgical correction of stenosis or atresia from urethral chancre. Cicatricial bands in the vagina contracting the urethra should be incised, stretched and loosened up. Bladder and urethral irrigation and flushing should be practiced in all cases. Treatment of congenital atresia will depend on the extent and the character of complications. It may be necessary, in extreme distention, to puncture the bladder to evacuate its contents, or incise, making either a vesicovaginal or a urethrovaginal fistula, before opening the atresia, closing the incision or fistula after the integrity of the reconstructed urethra is assured. Atresia complicated with vesicovaginal fistula should be dilated or incised, subsequently closing the fistula. Atresia complicated with urine escape at umbilicus through patulous urachus, should be dilated or incised without making a vesical fistula. After changing the course of the urine, the patulous urachus is supposed to close and atrophy. (A patulous urachus is sometimes observed in abdominal surgery.) Reed advises as follows:

Where atresia of the upper part of the urethra is associated with the vesicovaginal fistula, the operator may cut out the portion of the urethra and unite the neck of the bladder to the portion of the urethra below the excision. If atresia exists between a urethral fistula below and a vesicovaginal fistula above, the readiest way to deal with it is to thoroughly loosen up the tissue and bring the upper edge of the vesical fistula down to the outer edge of the urethral fistula. To unite such a fistula, however, a combination of the transverse and longitudinal operation may be done. A transverse incision may be made by making an artificial vesicovaginal fistula just above the neck of the bladder. The upper edge of this can then be stitched to the lower edge of the urethral fistula, and, after healing has taken place, the edges of the original vesicovaginal fistula can be closed by stitches placed so as to bring the edges together from side to side, leaving a longitudinal scar.

CASE 1, 1892 (referred to above).—Widow, aged 23, white. Bladder trouble for several years. Many physicians consulted. Urination frequent, painful, scanty. Urine examination, sp. gr. 1022, neutral, trace of albumin, no sugar by microscope, blood, pus, but no casts. Within one week, retention of urine for 20 hours occurred, bladder became distended, violent pain with tenesmus. Metal catheter located obstruction in middle third of urethra. Considerable force required to pass through stricture. Subsequent treatment, gradual dilatation (to 36, French scale), and bladder irrigation. History of gonorrhea several years before.

CASE 2, 1893.—Single, aged 19, colored, seen at my service at Emergency Hospital. Injured and burned by explosion of shotgun between thigh when a small girl. Extensive deformity from cicatricial contraction. Vulva distorted almost beyond recognition and drawn above pubes to left side. External meatus closed to pin-point size, by cicatrix. Urine passed by drops. Incised cicatrix, removing wedge-shaped piece, and dilated. Patient never returned. Subsequent history unknown.

CASE 3, 1898.—Married, aged 25, white. Resided in a southern city. Pregnant six months, had supposed ovarian tumor, operation had been advised. Consulted me, February, 1898. Complained of frequent, painful, scanty urination since childhood. Examination in office. Pregnancy determined, together with a tumor size of a cocoanut, sensitive and fluctuating, located on the right side of the uterus. Introduced metal catheter, locating stricture two and a half inches from meatus, admitting small whalebone bougie, gradually dilated stricture and forced silver catheter through obstruction, urine escaping constantly. Tumor promptly disappeared. Gradually dilated to 36 (French). I could learn no cause for stricture. Patient returned to her home and was delivered by her regular physician. I have recently learned that there has been no subsequent trouble. The tumor had every appearance of being ovarian, until urine was drawn.

CASE 4, 1900.—Single, aged 28, white. Neurasthenic, almost a nervous breakdown. Bladder weakness since infancy, almost incontinence. Still wets the bed at night. Been in sanitarium for spinal irritation, painful coccyx and hysteria, urine normal. Examination showed a small caruncle, urethra inflamed. Two strictures found at middle third. Gradual dilatation. Improved in health promptly. Nervousness disappeared. Complete control of bladder day and night. Patient now entirely well and married.

CASE 5, 1903.—Single, aged 38, white. Pelvic symptoms for past 20 years. Polypus uteri, frequent, painful urination. Disturbed frequently at night. Polypus removed, uterus curetted. Urethra explored under ether. Five strictures of various degrees found. Rapid dilatation. Patient apparently restored to perfect health.

CASE 6, 1903.—Single, aged 39, white. Always in bad health. Under physician's care more or less all her life. Uterine disease for many years. Urination frequent, scanty, painful, often wets the bed. Urine always reported to be normal. Menses almost constant, profuse, with clots. Examination, uterus enlarged, anteflexed, marked pelvic adhesions, cervix eroded. Under ether broke up pelvic adhesions, curetted uterus, explored the urethra, discovering two small strictures close together at middle third. Rapid dilatation. Patient has been steadily improving in health. All old symptoms have disappeared.

1821 Jefferson Place.

Poisoning by Honey.—The occurrence of severe poisoning following the ingestion of honey calls attention to the possibility of the collection by the bees of the active principles of some plants. Gelsemium and powerful narcotics thus have been the causes of giddiness, cardiac weakness, pruritus, amaurosis, edema of the glottis and even death. The occurrence is rare, but is to be remembered in view of the fact that the etiology in cases presenting some of these symptoms may not be readily discovered.

TAHITI FROM A MEDICAL STANDPOINT.

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Very few people who left the schoolroom twenty-five years ago would be able to locate Tahiti, and many of them have even forgotten the name. The children fresh from school recall it in connection with the difficulty they encountered in finding the little dot in the great trackless South Pacific Ocean, surrounded by a group of still smaller islands, called the Society Islands, so named in honor of the Royal Society of London by the famous explorer, Captain Cook.

Tahiti is nearly 4,000 miles distant from San Francisco, in a southwesterly direction below the equator, in latitude 17, hence in a latitude similar to that of the Hawaiian Islands, which are situated about the same distance north of the equator.

I had heard much of the beauty of this far-off island, and decided to spend my midwinter vacation by paying it a visit. Formerly the passage from San Francisco had to be made by a schooner, which required several months. For the last three years the island has been made readily accessible by a regular steamer service. The staunch steamer *Mariposa* of the Oceanic Steamship Company of San Francisco sails from that port every thirty-six days, makes the trip in twelve days, and remains at Papeete, the capital of the island, four days, which gives the visitor ample time to visit the most interesting points and make the desired observations.

The track of the steamer is over that part of the Pacific Ocean which is comparatively free from violent storms, between the storm centers east and west from it. The trade winds cool off the tropical heat in the vicinity of the equator, rendering the voyage at all seasons of the year a pleasant one. I know of no better way to spend a short midwinter vacation than a trip to Tahiti, the island paradise, the most interesting and beautiful of all islands. The twenty-five days of voyage on the ocean, the few days on shore, occupied by a study of its natives, their customs, manner of living, visits to the various points of historic interest, and the greatest of all genuine pleasures, the contemplation of nature's choicest exhibitions in the tropics, are best adapted to procure physical rest and pleasure, and pleasing as well as profitable mental occupation.

No writer has ever done justice to the natural beauties of this island gem of the South Seas. The towering mountains, the tropical forests, the numerous rippling streams of crystal water, shaded dark ravines, the palm-fringed shore, the lagoons with their quiet, peaceful, clear waters painted in most exquisite colors of all shades of green, blue and salmon, their outside wall of coral reef ceaselessly kissed by the caressing, foaming, moaning surf, the nearby picturesque island of Moorea, with its precipitious rugged mountains rising from the sea, the flat, basin-like, palm-clad atolls in the distance and the vast ocean beyond, all are pictures of which the mind never tires, and which engraft themselves indelibly on the memory.

The peaceful, quiet, sleepy little island is an ideal place for physical and mental rest. Nature has provided so well for the natives that labor on their part is rather a matter of choice than necessity. The few European and American inhabitants soon lose their inborn energy under the soothing and somewhat relaxing influence of the tropical climate, and limit the hours of their work to a minimum. The entire population, the laborer, the mechanic, the merchant, the rich and the poor, rest from ten until noon, and the doors of every shop are closed at five in the afternoon. The visitor will do well to follow the example of the natives, and devote the midday hours, the hottest of the day, to rest, and a short after-breakfast siesta.

THE CLIMATE.

The climate of Tahiti, although tropical, is favorably influenced by the trade winds and frequent showers. The breezes from ocean and land keep the heated atmosphere in motion most of the time, day and night. The entire island, from shore to the highest mountain peaks, is covered by forests and vegetation, which retain the moisture and attract the clouds, securing throughout the year a sufficient rainfall to feed the numerous mountain streams and water the rich soil of the mountain sides, valleys and lowlands along the shore. The temperature seldom exceeds 90 F., and during the coldest months, March and April, it occasionally falls as low as 65 F. The atmosphere is charged with humidity, and when this condition reaches the maximum degree the heat is oppressive, more especially when there is no land or ocean breeze. Papeete, partially inclosed by mountains, and on the leeward side of the island, is said to be one of the warmest places in the island.

Tahiti's summer time is our winter. I was fortunate in visiting the island during the latter part of January, which is the spring time there. It was the time when Nature makes a special effort to produce the luxurious tropic vegetation after the drenching rains of December. It was the time when the evergreen trees cast off here and there a faded leaf to be replaced by new ones from the unfolding buds. It was the season of flowers and the greatest varieties of fruits. For a winter vacation the months of January and February offer the greatest inducements. Those who are in need of a real rest and are fond of a long ocean voyage and enjoy tropic scenery and the wonderful products of the fertile soil of the tropics, should not fail to visit Tahiti, the little paradise built in the midst of the vast expanse of the Pacific Ocean.

INHABITANTS.

It was my privilege during my brief stay in the island to meet Tati, chief of the Papara district. He is a direct descendant of one of the two noble families of the island, the Tevas, and one of the most prominent and influential citizens of the colony. I asked him to what race the Tahitians belonged. He had a ready reply. He said: "We belong to no race; man was created here; this is the Garden of Eden." There is much force, if not truth, in this expression when we take into consideration the charming beauty of the island and the wonderful provisions which Nature has made here for the existence of man. Then, too, the Tahitian is a good specimen of manhood, intellectually and physically, far superior to the negro race and the Mongolian. The Tahitians are Polynesians, like the inhabitants of most of the islands in the South Seas, and there can be but little doubt that the Polynesians belong to the Malay race, having migrated from island to island, from west to east. The invasion of the island by so many Europeans during the last century has done much to destroy the original, genuine Polynesian type of its inhabitants, more especially of those who live in Papeete, the only city in the island. In the remote country districts the purity of the native blood has been preserved to a greater

extent, as well as the primitive customs and habits of the people.

In stature the Tahitian compares well with any other race. The face is expressive of more than ordinary intelligence. The aquiline nose is commonly seen among them, and there are many varieties both of hair and complexion. In complexion they resemble more nearly the Japanese than the Chinese. The beard is thin, the prevailing hair jet black, straight or wavy and long; eyes large and black; no drooping or obliquity of the eyelids. Their face is generally roundish; no unusual malar prominences; forehead slightly receding, mouth large, lips thick, wide nostrils, ears large, chin well developed. Much has been said about the beauty of some of the women of the South Sea islands, but I am sure I do them no injustice if I say that these descriptions are overdrawn by sentimental writers and do not correspond when put to the test of comparison with the reality. Old European residents of Papeete agree in that the morality of the natives has not improved since they have been under the influence of civilization forced on them by the European invaders. The greatest fault of the people is their incurable laziness, a vice for which they are not entirely responsible, as Nature has provided so bountifully for their needs.

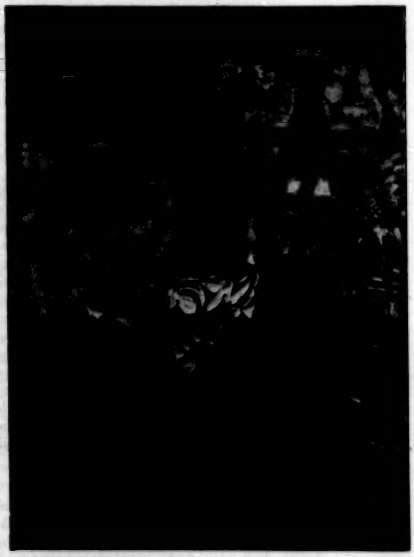

Fig. 1.—Type of Tahitian.

Robbery, stealing and murder are almost unknown; petty thefts, on the contrary, quite common. The people, young and old, are affable, extremely courteous and hospitable to a fault; the family ties strong and extending to the remotest relatives

FRIGHTFUL NATIVE MORTALITY.

The immediate effect of the European civilization on the health and lives of the natives was frightful. On this subject I will let Ariimaitai, a lady of noble birth and mother of the present chief of Papara, speak: "When England and France began to show us the advantages of their civilization, we were, as races then went, a great people. Hawaii, Tahiti, the Marqueses, Tonga, Samoa and New Zealand made a respectable figure on the earth's surface, and contained a population of no small size, better fitted than any other possible community for the condition in which they lived. Tahiti being the first to come into close contact with the foreigners, was first to suffer. The people, who numbered, according to Cook, 200,000 in 1767, numbered less than

Fig. 2.—Tahitian women.

20,000 in 1797, according to the missionaries, and only about 5,000 in 1803. This frightful mortality has been often doubted, because Europeans have naturally shrunk from admitting the horrors of their own work, but no one doubts it who belongs to the native race. Tahiti did not stand alone in misery; what happened there happened everywhere, not only in the great groups of high islands, like Hawaii, with three or four hundred thousand people, but in little coral atolls which could only support a few score. Moerenhaut, who was the most familiar of all travelers with the islands in our part of the ocean, told the same story about all. He was in the Austral group in 1834.

"At Raivave he found ninety or one hundred natives rapidly dying, where fully 1,200 had been living only twelve or fourteen years before. At Tubuai he found less than 200 people among the ruins of houses, temples and tombs. At Rurutu and Rimitara, where a thousand or twelve hundred people had occupied each, hardly two hundred were left, and while nearly all the men had died at Rimitara, nearly all the women had been swept away at Rurutu. The story of the Easter Islanders is famous. That of the Marqueses is about as pathetic as that of Tahiti or Hawaii. Everywhere the Polynesians perished, and to him it mattered little whether he died of some new disease or from some new weapon, like the musket, or from misgovernment, caused by foreign intervention. No doubt the new diseases were most fatal. Almost all of them took some form of fever, and comparatively harmless epidemics, like malaria, became frightfully fatal when the native, to allay the fever, insisted on bathing in cold water. Dysenteries and ordinary colds, which the people were too ignorant and too indolent to nurse, took the proportions of plagues. For forty generations these people had been isolated in this ocean, as though they were in a modern sanatorium, protected from contact with new forms of disease, and living on vegetables and fish. The virulent diseases which had been developed among the struggling masses of Asia and Europe found a rich field for destruction when they were brought to the South Seas. Just as such pests as lantana, the mimosa or sensitive plant, and the guava have overrun many of the islands, where the field for them was open, so diseases ran through the people. For this, perhaps, the foreigners were not wholly responsible, although their civilization certainly was; but for the political misery the foreigner was wholly to blame, and for the social and moral degradation he was the active cause. No doubt the ancient society of Tahiti had plenty of vices and was a sort of Paris in its refinements of wickedness, but these had not prevented the islanders from leading as happy lives as had ever been known among men."

These are strong words, but they are nevertheless only too true. Civilization brings to savage races curses as well as blessings. The primitive people are more receptive for new vices than new virtues. In 1880 the number of inhabitants had again increased to 13,500, but since that time it has been reduced to 11,000, as shown by the last census. The rapid depopulation of the island was caused by the introduction of new acute infectious diseases, such as measles, whooping cough, la grippe, etc., which among these people was attended by a fearful mortality. It was only last year that an epidemic of measles, a trifling disease with us, claimed several hundred lives and extended to nearly all of the islands of the entire group. The disease that is now threatening the extinction of the race in a short time is pulmonary tuberculosis. The natives are extremely susceptible to this disease, and the small native houses, crowded with large families, are the breeding stations for the infection. The French government has at last recognized the need of taking active measures to improve the sanitary conditions of their colony and protect the natives against the spread of infectious diseases. A corps of three physicians, sent by the French government on this mission, made the voyage from San Francisco to the island on the steamer *Mariposa* with me. The names of these physicians are: Dr. Grosfillez, surgeon major of the first class of the colonial troops; Dr. H. Rowan, a graduate of the Pasteur Institute, and Dr. F. Cassiau, of the clinic of Marseilles. The military surgeon receives an annual salary of $1,500, the two civil doctors $1,200 each. They are under contract for five years. They have been given judicial power to enforce all sanitary regulations they see fit to institute. They will be stationed at different points and will establish a requisite number of lazarettos, something which will fill a long-felt and pressing need.

(To be continued.)

THE INFLUENCE OF DENTAL DISEASE ON THE ETIOLOGY OF CERTAIN OCULAR DISTURBANCES.

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That dental caries and its allied processes figure to a considerable degree in the etiology of certain ocular disorders seems to have been generally recognised by those who have made this subject a matter of careful observation. Difficult early dentition, also, has long been considered in the same light, and as far back as 1824, Travers[1] called attention to strabismus as a symptom sometimes arising from this cause. Galezowski,[2] the eminent French ophthalmologist, has, for several decades, enthusiastically supported the theory of dental causation of various eye troubles, and many of the ablest contributions to the literature of this subject are from his pen. So strongly imbued with the teachings of his confrère was Weinberg,[3] that he expressed the belief that during a nine months' dispensary service he saw 188 cases of ocular disturbance dependent on morbid dental changes. Henry Power,[4] in 1883, read a meritorious paper on the subject before the Odontographical Society of Great Britain, and more recently Knies,[4] Bull,[5] Davis,[6] Weill[7] and others of our own country, have contributed valuable data. The text-books of ophthalmology and dentistry in general use, as a rule, however, devote little or no space to its consideration, and the matter does not appear to have received its deserved attention in the deliberations of scientific bodies or in the classroom.

The anatomic relations existing between the alveoli and teeth and the orbit and its contents are so intimate that one can readily appreciate how morbid changes of the one may influence, either by continuity or by so-called reflex manifestation, the functional relations of the other. As concisely indicated by Despagnet,[8] "the same periosteum which lines the orbital cavity extends to the alveolar border of the upper jaw; the mucous membrane of the mouth is in direct continuation with the conjunctiva. Many times the roots of the upper teeth extend directly into the antrum of Highmore, and from this situation disease frequently reaches the orbit through the thin partition of bone. The angular artery and certain veins run almost directly from one region to the other. The same general nervous supply reaches both, not only through the fifth pair, but also through the sympathetic system."

1. Trans. Odont. Soc. Gr. Brit., 1883-4, p. 11. (Power.)
2. Ann. d'Oculist., Paris, 1847, xvii, p. 59; also Jour. d'Oph., i, p. 606; also Rev. gén. d'Oph., October, 1888.
3. Recueil. d'Oph., 1882, p. 441.
4. Dis. of the Eye, 1895.
5. Internat. Dent. Jour., March, 1898.
6. Dent. Rev., 1899, p. 979
7. Pa. Med. Jour., Sept., 1900.
8. Recueil. d'Oph., July, 1900. (Abst. Ann. of Ophth., 1900.)

Among the ocular disorders that various writers have ascribed to dental disease as a causative factor are orbital cellulitis and abscess, conjunctivitis, keratitis, corneal ulcer, iritis, scleritis, papillitis, mydriasis, lachrymation, amaurosis, amblyopia, strabismus, ptosis, interference of accommodation and paresis or spasm of the several muscles of the eye and lids.

According to statistics compiled by Schwendt,[9] of 44 cases of orbital cellulitis, more than 15 per cent. resulted from dental caries. Hirsch[10] has since collected 25 cases of orbital abscess of dental origin, and other writers, notably Hildreth,[11] Burnett,[12], Vossius,[13] Fage,[14] Snell,[15] Juler,[16] and Galezowski,[17] have reported representative cases of the same disease of like origin. Burnett's case followed an unsuccessful attempt to extract an upper canine tooth, and resulted in total loss of vision. Snell's case, following the extraction of two upper decayed teeth for alveolar periostitis in a girl of 14, terminated fatally, and total destruction of the eye in Juler's case necessitated enucleation.

An additional case of abscess of the orbit, which fortunately had a more favorable outcome than those just cited, and which resisted treatment until attention was directed to the teeth, came under my care early in the year 1899.

Mr. H., aged 23, farmer, had been suffering intensely from pain in the region of the right eye for nearly two weeks. The lids were markedly edematous, the eye protruding and deeply injected, the pupil dilated, and the eyeball but feebly movable. Iced applications, leeching, and hypodermatic injections of morphia had but temporarily relieved the pain and given the patient little sleep, the inflammatory process meanwhile increasing in intensity. On the second day under observation it was noted that the cheek on the corresponding side was swollen, and questioning elicited the information that the patient had suffered periodically for several weeks from a diseased tooth. Extraction of a badly decayed molar was immediately followed by the escape of a quantity of pus, and antiseptic treatment brought about a rapid amelioration of the orbital and ocular symptoms.

Numerous cases of ocular disorders of reflex dental origin have been reported from time to time. Cafe,[18] DeWecker,[19] Sloggett,[20] Brucke,[21] Gaine,[22] Alexander,[23] DeWitt,[24] Allport,[25] Turner,[26] Coleman,[26] Stevens,[27] and Widmark[28] have recorded instances of amaurosis in which dental disorders have figured as important causative factors. Power, in his article cited above, reviews a typical case occurring in the practice of Sir William Lawrence of a man 30 years old, who suffered blindness for a period of thirteen months, which was restored by the extraction of an upper first molar. Examination of the tooth revealed a small splinter of wood, one-fourth of an inch long—undoubtedly the fragment of a toothpick—that had traversed the center of the decayed root, and had been retained. Palido,[29] Park,[30] and Despagne[3] have also cited cases of amblyopia due to dental disease.

Interference with the normal accommodation of the eye has been traced to morbid dental changes by Schmidt-Rimpler,[31] Ely,[32] Nuel,[33] Galezowski,[34] Knies,[35] Dunn,[36] and Bull.[37] Schmidt-Rimpler, in the examination of 92 patients suffering from dental disease, found the range of accommodation lessened in 78 per cent. Mydriasis is another condition frequently resulting from the same cause. Galezowski[38] was so impressed with this fact that he expresses the belief that dental changes are responsible for eight of ten cases of third nerve paralysis, instead of its being an invariable index of syphilis, as is generally supposed.

Several months ago Mrs. F., aged 38, was sent to me by her family physician. She had complained of severe headaches and inability to read or sew for a period of eight or ten weeks. The right pupil was widely dilated and there was no response to light stimulation. Patient was wearing weak convex lenses which had been "fitted" by a local optician. Examination revealed compound hyperopic astigmatism of both eyes, and the correction was ordered for constant use. Ophthalmoscopic examination was negative. There was no history of syphilis. Potassium iodid had been administered for several weeks in increasing doses to a maximum of 200 grains per diem, with no improvement. Examination of the teeth demonstrated a sensitive upper molar which presented a cavity of considerable proportions in which rested the remains of an amalgam filling. The tooth was properly treated, and within a fortnight the mydriasis had entirely disappeared

Ely,[39] Gill[40] and Desmarres[41] have reported like instances where the mydriasis disappeared with appropriate dental interference.

Various muscular anomalies have been attributed to dental disease by Hancock,[42] who cites a case of divergent strabismus and ptosis; Boyd-Wallis,[43] blepharospasm; Terrier,[44] "obstinate spasmodic contraction of the motor muscles of the eyelid"; Mumery,[45] strabismus; Power,[46] bilateral ptosis; Ely,[32] cases of paresis of orbicularis with diplopia and paresis of a rectus and the ciliary muscle; Juler,[47] "persistent jacitation of eyelids"; Hutchinson,[48] cases of spasm of eyelid and lagophthalmus, and Snell,[49] proptosis.

Many of the common inflammatory disorders, both extraocular and intraocular, seem to depend on dental causation in a fair percentage of cases. During the past two years I have seen two of the former—one of episcleritis—the other conjunctivitis—accompanied by supraorbital pain, ciliary tenderness and simulation of sympathetic irritation.

A man of 48 years came to my clinic presenting a well-marked localized injection of the sclera of the left eye. This condition had developed, according to a statement volunteered by the patient, simultaneously with an attack of toothache

9. Inaug. Dissert., 1882.
10. Prager med. Woch., 1894, p. 164.
11. Chicago Med. Examiner, April, 1866.
12. Arch. Oph., 1885, Nos. 2 and 3.
13. Graefe's Arch., 1884, xxx, p. 157.
14. Ann. d'Oculist., Paris, November, 1893.
15. Trans. London Oph. Soc., 1890.
16. Brit. Med. Jour., Oct. 19, 1895.
17. Recueil. d'Oph., 1882, p. 441.
18. Lanc. Française, Aug. 22, 1889.
19. Ann. d'Oculist., Paris, 1855, p. 130.
20. Ann. of Oph., vol. iz, ii, p. 251.
21. Ann. d'Oculist., Paris, 1856.
22. Brit. Med. Jour., cclxi, p. 623.
23. Monatsblätt. f. Augenh., 1868, vol. iv, p. 42.
24. Amer. Jour. Med. Sci., 1868, n. s., cx, p. 382.
25. THE JOURNAL A. M. A., Dec. 8, 1883.
26. Trans. Odont. Soc. Gr. Brit., 1884, p. 87.
27. Internat. Dent. Jour., March, 1891.
28. Ann. d'Oculist., Paris, Sept.-Oct., 1888.
29. Ann. Univ. Med. Sci., 1880, p. 129.
30. Ann. of Oph., Jan., 1893.
31. Graefe u. Saemisch Handb. d. ges. Augenh., 1877, vii, p. 72.
32. N. Y. Med. Rec., March 11, 1882.
33. DeWecker et Landolt, Traite, 1877, iii.
34. Recueil. d'Oph., 1882, p. 441.
35. Dis. of the Eye, 1895.
36. Amer. Jour. of Oph., Oct., 1891.
37. Internat. Dent. Jour., March, 1893.
38. Rev. gen. d'Oph., Oct., 1888.
39. N. Y. Med. Rec., March 11, 1882.
40. Kansas City Med. Rec., Sept., 1894.
41. Med. Press., Nov. 28, 1883.
42. Lancet, 1859, p. 80.
43. Trans. Odont. Soc. Gr. Brit., xviii, p. 173.
44. Recueil. d'Oph., 1878.
45. Trans. Odont. Soc. Gr. Brit., 1880, p. 252.
46. Lancet, April 9, 1881.
47. Lancet, 1884, p. 709.
48. Brit. Med. Jour., Dec. 28, 1895.
49. Trans. London Oph. Soc., x, p. 51.

several months previously. The further observation had been made that, as the odontalgia moderated in severity the eye symptoms gradually disappeared only to return when the dental disturbance recurred. So evident was the connection that the patient suggested the relationship at the first visit. On examination, the man was advised to have several roots extracted, and on submitting to the operation, was permanently relieved of the ocular trouble.

The other case was that of a girl, 16 years old, who came under my service at the Illinois Charitable Eye and Ear Infirmary. Six months previously she had been under my care on account of a scissors blade injury of the right eye, which destroyed the vision and left a scar extending almost entirely across the cornea. On her appearance at the infirmary she complained of intense supraorbital neuralgia and pain in the left eye so severe that she had been unable to sleep but little for forty-eight hours. The conjunctiva was deeply injected and there was ciliary tenderness and diminution of the power of accommodation. So distressing were the symptoms that sympathetic ophthalmitis at once suggested itself, and the patient was put under careful observation. The following day a slight swelling of the left cheek was noticed; the patient was sent to a dentist with the result that on proper treatment being applied to several upper teeth the ocular symptoms were promptly and permanently relieved.

Wright,[50], more than thirty years ago, published the history of a case of "sclerotitis" with profuse lacrymation that resisted treatment until a carious tooth was extracted, "when the inflammation subsided as if by magic." Ely,[52] relates a case of ulcer of the conjunctiva, undoubtedly of dental origin; White,[51] one of keratitis; Marlow,[53] three of "corneal congestion"; Hern,[55] scleritis; Nuel,[54] a case of conjunctivitis and ciliary injection; Colyer[56] and Roberge,[58] each one of corneal ulcer; Patterson,[65] a case of conjunctivitis with lacrymation; Galezowski,[57] Herman,[58] Despagnet,[59] Hirsch,[60] each a case of optic neuritis, and Feuer,[61] two of the same; Sous,[62] a case of keratitis punctata and choroiditis; Bull,[57] one of phlyctenular ulcer; Gill,[63] iritis and scleritis; and Milliken,[64] a case of iritis.

The number of cases which a review of the literature demonstrates, and my observations in the cases cited, leads to the belief that in dental disease is to be found an etiologic factor of more than passing importance in many ocular disturbances, and suggests the necessity of a thorough examination by a competent dentist in those instances presenting uncertain causative phenomena. A painstaking examination and intelligent surgical treatment will, in many cases, assist in elucidating various etiologic manifestations, and bring about permanent relief of the existing ocular trouble.

100 State Street.

50. West. Jour. Med., Aug., 1869.
51. Trans. Odont. Soc. Gr. Brit., 1884, p. 57.
52. N. Y. Med. Jour., April 24, 1888.
53. Ophth. Rev., Oct., 1889.
54 DeWecker et Landolt, Traite, 1887.
55. Trans. Odont. Soc. Gr. Brit., 1890-91, p. 183.
56. L'Union med. du Canada, March, 1897.
57. Rev. gen. d'Oph., 1888.
58. Centralblat. f. prac., Aug., Dec., 1893.
59. Jour. de Med., Paris, July 30, 1893.
60. Wien. med. Wochensch., 1893, vol. xxxiv.
61. Ann. of Oph., 1895.
62. Jour. de Med. de Bordeaux, 1896.
63. Kansas City Med. Rec., Sept., 1894.
64. Arch. of Oph., March, 1900.

No Race Suicide in Texas.—The *St. Louis Medical Review* declares that the birth rate in Texas is almost twice that of the death rate, and declares that the population of Texas is growing at an astonishing rate. In one particular county the deaths exceeded the births, which was explained by the fact that that county included San Antonio, a health resort for consumptives, many of whom die.

Clinical Report.

TENIA NANA: REPORT OF TWO CASES.

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The following cases are reported as of interest, because the parasite is considered very rare in this country:

Case 1.—Private J. W. M., Company M, First Infantry, admitted Jan. 14, 1904. Patient states that he served in the Philippines from May, 1901, until April, 1903, and that he contracted amebic dysentery in December, 1903, from which he never fully recovered, remaining pale and weak with capricious appetite and irregular bowels; that the passages have averaged two to four a day, and have usually contained mucus; that occasionally the diarrhea has ceased for a few days, and he has then been troubled with constipation, and that he has had frequent attacks of pain in the upper part of the abdomen, at times so severe as to cause profuse sweating.

Examination on Admission.—Nothing worthy of note was found except a fairly well-marked anemia with thick pasty facies. Body fat is well retained, but patient appears to have lost much strength, and is unable to get through the day's work satisfactorily.

Microscopic examination of the stools showed numerous round and slightly oval ova about 35 microns in diameter, having a clear outer circle without radiations, but occasionally marked by irregular wavy tracings and showing in the center four parallel lines, the two outer with a slight angle and thickening at about one-third their length, and the two central ones with a slight dot at the same point, but nearly straight.

Treatment.—Male fern followed by castor oil brought away about 50 worms measuring 10 to 15 mm. in length, the head having a retractile proboscis with a single row of about 24 hooklets, and back of these 4 suckers. The segments numbered from 50 to 150, and increased greatly in size toward the tail, those fully developed containing myriads of ova and measuring in width several times their length.

Case 2.—Private F. A. F., Company I, First Infantry, admitted Jan. 27, 1904. Diagnosis staphylococcus infection of trivial wound on the little finger of the right hand. He served in the Philippines from February, 1902, until May, 1903, and while there had two short attacks of diarrhea. He has been well since he returned to the states, except for occasional abdominal pain, which he attributed to indigestion.

Examination.—The physical examination was negative.

The routine examinations of the stools as made for all patients showed ova as in the first case, and the same treatment brought away over one hundred worms. Owing to the difficulty of recognizing these minute cestodes in the stools, I have no doubt that many hundreds were present in each case.

Comments.—The method which so far has proved most satisfactory in finding the parasites is to dilute the stool with a considerable quantity of water, and then to run it out in a very thin layer on a large plate of window glass having a black background and placed in a strong light, the examination being made with a large reading glass. The worms appear as very minute translucent or opalescent shreds not unlike mucus, and the greatest care is required lest they be overlooked. The ova are found with the microscope much more easily than the worms themselves, a two-third objective being ample after one becomes familiar with their appearance. The spread should be very thin, and but little light admitted from the condenser.

Gray Hair Versus Baldness.—Marcel Baudouin of Paris has made a discovery. He will not announce what it is until the consensus of opinion has confirmed the assumption which he has recently proclaimed that persons whose hair turns prematurely gray never grow bald, while persons who are bald never are prematurely gray. If this assumption be confirmed he thinks he can explain the reason for the facts observed.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

103 DEARBORN AVENUE .... CHICAGO, ILL.

Cable Address ... "Medic, Chicago"

Subscription price ..... Five dollars per annum in advance

SATURDAY, APRIL 2, 1904.

LET YOUR INFLUENCE BE FELT.

Every member of the medical profession should be sufficiently interested in the Pure Food bill, now before the United States Senate, to take the trouble to write to the two Senators of his state urging them to vote for it. There is an opportunity for the profession to make itself felt in a good cause. Why not do it? It should not be forgotten that, in this instance especially, delays are dangerous.

Read the bill on page 910, and then act.

THE CAUSE OF YELLOW FEVER AGAIN.

The investigations of Reed, Carroll and Agramonte into the causation of yellow fever, which are fresh in the minds of all, seemed to be so universally convincing that we naturally expected any further researches in that domain to follow along the lines laid down by them, and to be concerned with the nature of the ultramicroscopic virus which their experiments indicated as the causative agent of this disease. Interest in the various bacteria described by different observers as the cause of yellow fever has waned since the publication of the experiments of the American Commission and it is therefore somewhat surprising to find new evidence being brought forward now for the *Bacillus icteroides* of Sanarelli and to hear the statement made that this is recognized by almost the whole scientific world as the cause of yellow fever. Ivo Bandi of Brazil gives in the *Zeitschrift für Hygiene*[1] the results of his studies and experiments in this field and asserts that they confirm in all essentials the views of Sanarelli. The article in question is written in an unfortunately partisan spirit, reminding one of Sanarelli's attitude toward his opponents, but the researches embodied in it are interesting and merit attention, though it is a question whether they materially strengthen the weak points in Sanarelli's position.

It will be remembered that the claim made by Sanarelli[2] that he had discovered the cause of yellow fever in the *Bacillus icteroides* was based on the following assertions: It was found in 58 per cent. of the bodies of patients dying of yellow fever; had special cultural characteristics; could be used to produce experimental yellow fever in animals; the serum of immune animals and convalescent patients agglutinated the bacillus, and that of immune animals had prophylactic and therapeutic properties against yellow fever; the germ-free filtrate of cultures produced typical yellow fever in man.

Many investigators assert that they have confirmed these statements of Sanarelli; nevertheless the organism has never won for itself an undisputed place. The objections urged against Sanarelli's assertions are that the *Bacillus icteroides* can be isolated in only a few cases, and then in very small numbers—even Sanarelli's 58 per cent. is a small percentage. Investigators working with cultures obtained from Sanarelli or his followers are unable to repeat the former's experiments as to characteristic lesions produced in animals by inoculation or as to agglutination. The cultural peculiarities are found to be variable and such as might belong to a member of the hog cholera or colon groups. The human experiments of Sanarelli were not adequately controlled, for as Novy[3] pointed out, we know nothing of the effect of intravenous injections of filtered cultures of typhoid or colon bacilli. A strong argument against the causative rôle of this organism is that it is very resistant to cold, enduring, without loss of virulence, three days of freezing, while yellow fever is a disease of warm climates and vanishes with the first frost.

The researches of Bandi should, if they are to justify the assertions made in the opening paragraphs of his article, serve to refute the above objections, and this he endeavors to make them do. To the objection that the *Bacillus icteroides* can so seldom be isolated and when isolated is found in such small numbers, he answers that it resembles the tetanus bacillus in producing a very powerful toxin while multiplying only to a limited extent; yellow fever is a toxemia. Yet he was unable to prove the presence of such a toxin by injections into animals of the blood and organs from the bodies of yellow fever patients, although these animals are susceptible to the *Bacillus icteroides*. Novy had already found that it was necessary to use an enormous dose, 20 c.c., of the filtered culture, to cause death in a guinea-pig in twenty-four hours. Bandi succeeded in isolating the organism in about as large a percentage of cases as did Sanarelli, twelve out of twenty autopsies. Its habitat within the body, however, he was unable to discover, for there are no characteristic focal lesions which can be attributed to it. His experiments on dogs were very successful and constitute the most striking part of his paper. By intravenous injections in dogs, he produced all the typical symptoms of yellow fever, with the exception of jaundice, and after death found fatty degeneration and necrosis of the liver cells, more extensive than that produced by any known organism.

Opposed to these experiments of Bandi are those of Novy, Agramonte[4] and Havelberg,[5] all of whom found

1. Zeitschrift f. Hyg., 1904, No. 1, p. 81.
2. Ann. d. l'Inst. Pasteur, 1897, pp. 433 and 733.
3. Medical News, 1898, pp. 331 and 360.
4. Ibid., 1900, p. 249.
5. Berliner klin. Woch., 1903, pp. 705 and 735.

no lesions in the organs of dogs injected with the bacillus in question which could not be produced by other organisms, as, for instance, certain strains of *Bacillus coli*. Bandi finds, contrary to the experience of Sanarelli, that the blood of yellow fever convalescents and immune animals does not agglutinate the *Bacillus icteroides*, which in this respect resembles the Klebs-Loeffler bacillus. Havelberg, on the contrary, found that it was easy to produce an agglutinative serum in animals, but that the serum of yellow fever patients had no such property. His criticism of the work of Reed, Carroll and Agramonte, based on his own failure to produce yellow fever experimentally in human beings by the bite of the *Stegomyia fasciata;* on the assertion that the distribution of the stegomyia does not entirely correspond to that of yellow fever; on the history of epidemics which seemed to have no relation to this insect; on the apparent conveyance of yellow fever through infected clothing, etc., remind one of the arguments used at first against the theory, now universally accepted, of the agency of the mosquito in the spread of malaria. A more serious objection is that which he makes to the experimental production of yellow fever in man, by the injection of filtered serum, on the ground that the filter used by Reed and Carroll was a Berkefeld, which allows the *Bacillus icteroides* to pass through. To this the answer may be made that the filter in question had been tested and found to hold back all demonstrable bacteria, nor would an exposure to a temperature of 55 degrees for ten minutes be sufficient to kill the bacillus of Sanarelli, which is as resistant to heat as the typhoid bacillus, yet this procedure was sufficient to destroy the virus in the serum, according to Reed and Carroll. The work of Bandi can not be regarded as having strengthened the cause of *Bacillus icteroides*.

SURGICAL TREATMENT OF MOVABLE KIDNEY.

A continued interest in this subject is shown by the number of clinical studies of large series of cases which are reported each year. Movable kidney is undoubtedly very common, and the symptoms which co-exist with such movability, or are caused by it, are sources of discomfort and disability to many women. That the condition is not an easy one to treat successfully is shown by the differences of opinion as to the best method of treatment. Since nephropexy was introduced by Hahn in 1881, various opinions have been expressed with regard to the advisability of operation. At first, as is often the case after the introduction of a new operation, many surgeons were enthusiastic in stitching up every movable kidney they could find. This operation furore led to more careful examination of cases, and showed how prevalent the condition is, some observers estimating that sixty or eighty per cent. of all women have movable kidney. Several interesting papers have appeared in American journals during the past year which have added to our information with regard to this subject. Larrabee[1] gives a thorough clinical study of one hundred and twelve cases of movable kidney from the out-patient department of the Boston City Hospital. His statistics with regard to the frequency, etiology, symptoms, etc., make a valuable contribution. Treatment by operation or mechanical support was considered unnecessary in eighty-seven out of one hundred and twelve cases. Many patients were not informed of the presence of the anomaly, and when this was inadvertently done in one case symptoms promptly appeared.

Twenty-five patients were advised to wear swathes to support lax abdominal walls, the symptoms being attributed to enteroptosis rather than to the movable kidney alone. In two cases in which operation had been previously done, neither patient had been relieved. In one an unsuccessful nephropexy was followed by nephro-ureterectomy, which also failed to give relief. Larrabee did not advise surgical treatment in a single instance, and he believes that the temporary use of a bandage may tide a patient over poor health or debility until she has returned to normal health and flesh, when the symptoms usually cease.

Aaron[2] reports four hundred and forty-two cases of movable kidney treated without surgical intervention. He gives some specially valuable suggestions as to the methods of fitting supporting bandages, and believes that ninety to ninety-five per cent. of patients can be cured by a properly fitting support.

He emphasizes the importance of mapping out the position not alone of the kidney, but of the liver, stomach and other abdominal organs, which are often also displaced and in need of support. He emphasizes the indifference of many instrument makers and dealers in supporting bandages, and states that in some cases he has been obliged to have as many as five different bandages made for a single patient before a satisfactory one was obtained. Like Larrabee, he emphasizes the frequency with which enteroptosis co-exists with movable kidney, and believes that this is always the case when gastro-intestinal and nervous symptoms are present. He approves of operation only in cases of Dietel's crisis from the kinking of the ureter.

Goelet[3] takes an opposite view from these observers, and apparently believes that practically all cases of movable kidney should be operated on. He points out many reasons why the operation is frequently a failure, as well as the post-operative influences which tend in this way. Among points of importance mentioned are: Failure to detach completely the fatty capsule on the posterior surface of the kidney, which is left adherent to the colon and is thus dragged on; improper insertion of sustaining sutures or their too early removal or absorption, and attachment too low down are also men-

1. Boston Med. and Surg. Jour., 1903, vol. cxlix, p. 586.
2. American Medicine, 1903, vol. vi, p. 893.
3. New York State Jour. of Med., 1903, vol. iii, p. 497.

tioned. Among post-operative influences causing failures he mentions vomiting or coughing after anesthesia, which loosen the attachment, turning to the opposite side, assuming an erect position or undertaking some exertion too early, neglect to adjust support for relaxed abdominal walls after operation or to correct digestive disorders. These suggestions are all of much importance in obtaining satisfactory results.

The different views of these writers may lead to confusion in the minds of some as to what course should be followed in these cases. The papers of Larrabee and Aaron emphasize an important fact which has often been brought out by other observers, the frequent co-existence of general enteroptosis with movable kidney, and that the symptoms may be as much due to the general condition as to the movability of any one special organ. Many prominent surgeons are inclined to agree with these internists that operation is not to be advised in the majority of cases. Keen has shown in how large a percentage of cases the results of operation are not satisfactory, and Morris of London, whose experience in renal surgery is probably as great as that of any living surgeon, says that when movable kidney is associated with enteroptosis, no operation should be performed. All must agree with Aaron that operation is advisable in all cases in which crises of pain occur, and we believe that by careful observation other cases can be selected in which the symptoms are chiefly caused by renal movability, and in these cases operation is, no doubt, advisable.

Valuable as are Goelet's suggestions as to the causes of failure from faulty operative technic and post-operative influences, we do not believe that failure to fix securely accounts by any means for the failure to relieve symptoms in all cases. The opinions of eminent surgeons whom we have quoted seem sound, and their failure to obtain satisfactory results certainly can not be attributed to faults connected with the operation, but are probably due to general enteroptosis; the vague discomforts caused by sagging, not only of the kidneys, but of many of the other abdominal viscera.

THE PURE FOOD AND DRUG BILL.

If there was ever a question before the national legislature in which the medical profession should be interested it is the Pure Food bill now before the United States Senate. We are sure all who read the bill, which we have already published in part and which we reproduce this week in full,[1] will at once realize its vast importance. The difference between the measure as it passed the House and the substitute reported by the Senate Committee on Manufactures is clearly defined in Senator Heyburn's letter to Dr. Reed,[1] and relates to questions of administrative detail rather than to the principles involved.

The hearings on this measure before the Senate Committee on Manufactures revealed some very interesting facts. Thus the attempt made in the bill to establish the United States Pharmacopeia as the standard of purity for drugs was combated by the proprietary medicine men with the representation that the United States Pharmacopeia was published only every ten years; that many new preparations, on which it was necessarily silent, came into use during each decennial interim and that, consequently, the United States Pharmacopeia could not be made available as a standard. This representation, naturally enough, only suggested the necessity for an additional provision, which the committee promptly framed, to protect the public from these rapidly multiplying "inventions." It was but natural, therefore, that the strictly sordid commercial interests should turn fiercely against the entire measure. The proprietary medicine trust was deeply if not vitally interested. It dropped its policy of direct representations to the committee and took recourse to its customers, the retail druggists, who, scattered all over the country, have been instigated to write letters and send telegrams to their respective senators protesting against the passage of the bill. The pressure in this instance is that of credit, which the large manufacturing concerns are in position to extend or not to their patrons, who, by counter prescribing, vend these dangerous nostrums directly to the public.

And that these nostrums, many of them at least, are dangerous in both a positive and negative sense, was also made apparent at the hearing. The testimony was direct and positive that a number of these new "inventions" were essentially poisonous, while others, innocuous so far as their ingredients were concerned, were dangerous because of their inefficiency. It was broadly stated that a number of them, by substitution of constituent elements, were frauds, a fact long and painfully known to the medical profession. The greatest danger of all, however, is the fact that the formulæ of many of these proprietary compounds are variable. As a consequence, when the Senate committee suggested that these formulæ ought to be published, or at least registered, and that it would be only fair to hold the manufacturers to their own standards, the objection was urged—the startling admission was made—that such a course would be ruinous to the large commercial interests involved. It thus becomes apparent that, in prescribing unofficial preparations physicians are very liable to be prescribing only a name with no guarantee that that name stands for anything definite either in number, quantity or quality of ingredients. Facts of this kind have long been known or at least surmised by physicians and their confidence in modern pharmacy has been almost shattered. It is true that there are many excellent pharmaceutic houses whose products have met the expectations of the profession for many years, which stand to-day on the firm foundation of well-grounded character and in which the profession has full confidence. These houses can not be injured either by this discussion or

1. See pages 910-911.

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190

by the proposed law. They, however, owe it to themselves, at this particular crisis, to lend their best efforts in securing the passage of the pending bill, which, if enacted into law, will protect them by elevating the character of American pharmaceutic products in general. There is nothing in the proposed law to which any honest pharmacist can object. The protests of others ought to have but little weight with the Senate.

Beside the proprietary medicine concerns, there are the vast commercial interests involved in food adulteration and the opposition from this source and from the still more active hostility of the liquor interest working in behalf of compounded and blended drinks under various names has supported a powerful lobby ever since the beginning of the consideration of the bill.

The duty of the medical profession at this juncture is obvious. Every physician should bring his utmost influence to bear on the question. Whether he is a committeeman appointed for the purpose or not, he ought at once to write the strongest possible letter to each of his United States senators; he ought to get others, both within and without the profession, to do likewise, and especially ought he to get his druggist to co-operate. The influence of the physicians in a community on the druggist ought to be at least equal to that of the patent and proprietary medicine men. He ought to put himself in touch with the member of the National Auxiliary Congressional and Legislative Committee for his county and co-operate with him to the fullest extent. The issue is fairly joined between the proprietary medicine men and the reputable medical profession. It remains to be seen which of the two can command the most attention of the United States Senate.

THE THERAPEUTIC VALUE OF OLIVE OIL IN GASTRIC AND INTESTINAL DISEASES.

The space devoted to the therapeutic uses of olive oil in most text-books is very small, reference usually being made to the nutritive value of the oil and its use by some physicians in gallstone attacks. Rutherford[1] and his colleagues at the Army General Hospital in San Francisco have recently given an extensive trial to this medicament in cases of chronic dysentery with excellent results. Most of the cases were long-standing ones, in which the various recognized remedies for the disease had been tried over long periods of time with unsatisfactory or only partly satisfactory results. The oil was given in very large doses over long periods of time; beginning with doses of thirty cubic centimeters three times a day, the dose was gradually increased to ninety cubic centimeters three times a day. At first it was necessary to disguise the taste of the oil by mixing it with milk, but the patients soon acquired a toleration to or even a strong liking for the oil. Of the first twenty-eight completed cases under this treatment, seventeen returned to duty, and only two of these had any evidences at all of dysentery. The remainder were either discharged improved or passed from notice. Rutherford regards the results as being due in large part to the effect of the oil on the biliary secretion. The bile is increased in quantity and acts in a threefold manner; it favors the absorption of fats, stimulates peristalsis, and acts as an intestinal antiseptic. This is shown by the presence of an increased amount of bile in the feces, the cessation of signs of fermentation and putrefaction, and the general systemic improvement.

Paul Cohnheim,[2] who has been a consistent advocate of the use of olive oil in certain diseases of the stomach and duodenum, has also recently published a series of cases bearing on this subject. He advises the use of oil, particularly in cases of pyloric stenosis due to spasm of the pylorus from fissures or small ulcers. He has used it also in cases of stenosis from contracted ulcer or perigastric adhesions with a good degree of success, and even in malignant stenosis, when not too far advanced, he has found it of value. The main symptom which he regards as an indication for the use of the oil is a burning, boring pain radiating from the epigastrium upward and laterally, and occurring from two to four hours after eating. This he regards as one of the most constant symptoms of gastric ulcer or fissure. In most of his cases there were also hyperchlorhydria and definite dilatation of the stomach. The advantages of the oil are many; it relieves cramps, it lubricates the opposing surfaces of the ulcer or fissure, it reduces the hyperacidity, and it acts as a food. Cohnheim advocates the use of the oil in one large dose the first thing in the morning before food has been taken. The dose which he usually gives is from fifty to one hundred cubic centimeters. The oil is heated to the temperature of the body, and the patient lies on the right side for fifteen or twenty minutes after taking it, food being abstained from for one hour. Many patients come to like the oil, and the only unpleasant feature, a raspy feeling of the gums, may be relieved by a pinch of salt, a taste of cognac or a peppermint drop.

Rutherford advises the use of strictly pure olive oil; Cohnheim makes no mention of this, so it is fair to assume that he considers the ordinary olive oil of commerce to answer every purpose. It is probably rare that any adulterating agent is used except cotton-seed oil, of which so much is said. Many samples of alleged olive oil from Europe have been found to be mostly cotton-seed oil, which has been sent from the United States to be shipped back across the water in fancy bottles. Since it is necessary to use a good grade of the adulterant in order to pass it off as olive oil, there is little danger of its containing any injurious fatty acids or other accidental substances. The cotton-seed oil itself is similar to olive oil in effect, but some authorities think it of less therapeutic value. Since it is much

1. American Medicine, vol. vii, No. 11.

2. Zeitschrift für klinische Medizin, vol. xlii, Nos. 1 and 2.

cheaper than olive oil, experiments would be of value to determine its standing as a food and as a medicinal agent. For the present, however, while there is no reason for the apprehension that is felt regarding the adulteration of many foods and drugs, it seems sensible for one who is pretending to give olive oil to see to it that olive oil is really given and not cotton-seed oil.

THE PNEUMONIA DEATH-RATE.

The changeable weather of these last few weeks after the severe winter has caused a lowering of resistive vitality in practically all weakened individuals, which has been followed by an alarming increase in the number of deaths from pneumonia in nearly every city in the country. There seems no doubt that the disease is much more prevalent and even more fatal than it has been any time during the past decade, at least. At the same time there is no question that pneumonia is now recognized much more surely than was the case even ten or fifteen years ago. This is especially true as regards children. And it must not be forgotten that a large proportion of the present death-rate from pneumonia is due to deaths of those under five years of age. In the olden times a child died from measles or whooping cough that now dies from bronchopneumonia, complicating measles or whooping cough. The same thing is true for other infectious diseases of childhood. Among adults, too, there is no doubt that in many cases, especially among the old, death was attributed to an affection of the heart or to a complication of diseases or to the nephritis that is so often the underlying reason for the lowered resistive vitality on the basis of which the pneumonia develops rather than to the terminal pneumonia which now figures so prominently in these statistics.

We would not wish to discourage in any way the laudable efforts of boards of health to decrease if possible the death-rate from pneumonia, but we cordially deprecate the present scare-headlines in newspapers, which have proved so disheartening to so many patients who would otherwise have had the courage to face their pneumonia without undue shrinking. Everyone knows how important, in diseases of the lungs particularly, is tranquillity of the patient's mind. Under present circumstances it is very difficult to secure this. In many cases no amount of reassurance by the physician will undo the lamentable effect of the discouragement produced by pessimistic newspaper discussions of pneumonia.

Even at the present time, it must not be forgotten that pneumonia is of itself not an especially fatal disease. As has been very well said, the prognosis of pneumonia in patients who are over fifteen and under fifty depends very much on what constitutional dyscrasias the patient labors under when the pneumonia attacks him. If there is an affection of the heart the patient is almost inevitably doomed. If there is an affection of the kidneys, it matters not what treatment be employed, it will only be by the most fortunate chance that the patient will survive. If the patient has had an affection of the lungs, the pneumonia may be recovered from, but it is almost inevitable that the patient will have subsequent exacerbations of the previously existing pulmonary trouble. It is these three complicating factors that make pneumonia so serious a malady, and not the pulmonary affection itself in spite of all the talk about it.

It is well understood that patients suffering from heart or lung or kidney affections, do not stand continued cold well. As a result of this, we have many more in our population with lowered resistive vitality this spring than has been the case for over a quarter of a century before. It is this that has caused the increased mortality of pneumonia. Doubtless in many of the large cities influenza prevails, and the depressing effect of this disease makes the prognosis of pneumonia especially unfavorable.

There are certain other factors at work which serve to explain and minimize the appalling notion that might be gathered from pneumonia statistics, and these in the present state of the public mind should, it seems, be emphasized.

Many of our people have grown accustomed to taking depressant drugs of various kinds for the slightest pain or ache, and these have undoubtedly had an effect, especially on sufferers from heart and kidney disease. If the increase of advertisements can be considered as evidence—and students of the psychology of advertising are quite ready to think so—then stimulants are being used more commonly in this country than before. This does not mean necessarily to excess, but the moderate, regular drinker is much less likely to recover from pneumonia than the man who has never been accustomed to take spiritous liquors except for special reasons at longer intervals.

It would seem advisable at the present moment for physicians to keep many of these considerations before the public in order to prevent the evil effects of too much scare-head sensationalism with regard to pneumonia fatality. Patients whose resistive vitality is distinctly lowered by the severe winter just passed must be warned of the dangers they incur in crowded cars, department stores, depots, theaters and the like, and must also be warned not to neglect the first symptoms of the disease, and especially not to consider that a chill is due only to a cold and that they will probably shake it off.

SANITATION AND THE PANAMA CANAL.

The efforts to secure a member of the medical profession on the Isthmian Canal Commission, while in one sense resulting in failure, were not entirely lost. The letters and telegrams which poured into the executive mansion asking for the appointment of Major Gorgas, reached the President too late to secure all that was asked, but recent developments show that the President was influenced by them. In the letter of instructions to the Isthmian Canal Commission the President specific-

ally mentioned only one thing, and that was the sanitary arrangements. In his letter he said:

There is one matter to which I wish to ask your special attention, the question of sanitation and hygiene. You will take measures to secure the best medical experts for this purpose whom you can obtain, and you will, of course, make the contractors submit as implicitly as your own employes to all the rules and regulations of the medical department under you. I presume you will find it best to have one head for this medical department, but that I shall leave to your own judgment.

We understand that Major Gorgas will be given charge of the sanitary arrangements, although no definite action regarding the matter has been taken.

GLYCERINATED VACCINE LYMPH.

Nothwithstanding the widespread use of glycerinated lymph in the last few years there are certain fundamental facts regarding it which as yet have not been thoroughly grasped by the profession at large. We refer particularly to the different effects produced by vaccine lymphs of different ages. These points are of great practical importance, and have recently been emphasized anew by Levy.[1] As this author states, the glycerin was originally added to the lymph with the idea that it caused a rapid loss of virulence in the pus cocci which are almost always present in the lymph, without materially affecting the activity of the vaccine organism. As Levy points out, the latter organism is also weakened in activity by the glycerin, and much more rapidly than was at first supposed. Levy compares the effect of fresh and old lymph on revaccinated cases, and on original vaccinations. His main conclusions are that in original vaccinations the lymph used should always be at least four weeks old, since lymph of this age rarely causes the severe inflammatory reaction seen after the use of fresh lymph. On the other hand, fresh lymph should always be used in revaccinations, as old lymph often fails to produce any reaction in cases which are susceptible to vaccinia, but only when a strong lymph is used.

THE CONTAGION OF SCARLET FEVER.

In this issue of THE JOURNAL we abstract an article from the *Lancet* by Dr. Lauder, who expresses the opinion—not a new one—that the contagion of scarlet fever is conveyed by the respiratory tract, and that the constitutional condition and rash are only the results of toxic products and not dangerous as regards the spread of the disease. This is an opinion quite contrary to the one ordinarily received, but his experience reported in the article referred to in the management of scarlet fever would seem to indicate its correctness. The germ of scarlet fever is one that is unknown to us, and, therefore, our knowledge of the disease is to that extent limited, but a careful clinical study will enable us to do much to check the ravages of even an unknown germ. The capriciousness of the contagion of scarlet fever has been observed by almost every practitioner, and it may perhaps be explained by the observers' assumption that the contagion was conveyed in the rash and its products. A closer study of the cases with a view as to the dangers of respiratory matter and the conditions of the throat and nose will perhaps make this capriciousness in scarlet fever less mysterious. As in diphtheria, it is possible that the greatest danger is in the intimate contact with the patient, and that the infection itself is sometimes comparatively short lived. This, however, is a matter for further study.

1. Münchener med. Woch., No. 7, 1904.

THE DIAGNOSTIC VALUE OF EOSINOPHILES IN THE SPUTUM.

Since their discovery by Wharton Jones, the coarsely granular leucocytes, now known as eosinophiles, have attracted a good deal of attention. In recent years their increase in the blood in certain diseases, and particularly in diseases caused by intestinal parasites, has led to renewed activity in their investigation. The increase of these cells in the sputum in asthma, and their relation to the Charcot-Leyden crystals, have been repeatedly discussed. In diseases of the lung, other than asthma, various observers also have described either an increase or a lack of eosinophiles. In general, there has been an agreement among these authors that the eosinophiles are increased in asthma and bronchitis and decreased in tuberculosis, so that in cases of suspected tuberculosis, in which tubercle bacilli could not be found, an absence of eosinophiles from the sputum was thought to favor a diagnosis of tuberculosis. Some writers have, however, persistently asserted that eosinophiles were present in tubercular as well as in asthmatic and in bronchitic sputum. In a recent article, Hildebrandt[1] gives his results of studies on this question. The sputum was obtained from cases of various forms of tuberculosis—cases with acute and chronic bronchitis, bronchial asthma, pneumonia and lung infarcts. The conclusion at which the author arrived was that eosinophiles in the sputum were a rule rather than an exception; that they were not a diagnostic sign of bronchial asthma, and that they were present in pulmonary tuberculosis. In view of the recent comparative work of Opie,[2] who demonstrated the frequency with which eosinophiles are found in the respiratory tract, and also noted their extrusion into the lumen of the bronchi, their presence in the sputum might be expected frequently. A careful histologic study of human lungs in normal and pathologic conditions to determine the frequency of eosinophiles in the air passages, and the conditions which influence their migration, seems indicated.

CANINE MALARIA.

Experiments on animals are undoubtedly of the greatest value in settling special questions, but there is a large field of clinical observation in more general lines that is equally valuable in medicine. The comparative pathology of diseases is a study which has not received as much attention as it really deserves. Especially is this the case with our domestic animals, whose close association with the human species renders their disorders of special interest and often of serious importance to their masters. Dr. A. B. Dalgetty of South Sylhet, India, reports[3] the case of a fox terrier which seemed out

1. Münchener med. Woch., vol. li, No. 3.
2. Amer. Jour. Med. Sci., Feb., 1904.
3. Jour. of Tropical Medicine, March 1.

of sorts with a certain periodicity of symptoms and with hematuria; these facts led him to investigate the blood, and he found a large number of parasites very closely resembling the malarial germ. The ring-shaped appearance recalled the parasite of malignant malaria. There was intense anemia, and an examination of the blood-colored urine revealed no red corpuscles, showing that the color must have been due to the hemoglobin alone, and that the destruction of the blood cells was very great. The therapeutic test bore out the diagnosis. Quinin in two- to three-grain doses was given daily for some time, and the immediate improvement showed that the disease was of malarial nature. As soon, however, as quinin was discontinued the old symptoms recurred, though in a milder form. Considering that the disease was due to the malarial parasite, Dalgetty asks whether it might not be fairly established that the dog is a possible source of infection to man, perhaps carrying malaria into sections where it may not have existed. We have not before seen an account of such a case in a dog so closely resembling the malignant malaria with its accompanying hemoglobinuria. It is not mentioned by either Scheube or Manson. The diseases of our domestic pets are very much neglected, and their involuntary revenge may be expensive and inconvenient. The subject is one that is worth further study; in fact, the subject of diseases in the lower animals deserves a pretty thorough elucidation as a matter of human self-defense.

THE RELATIONS BETWEEN MEAT POISONING AND PARATYPHOID FEVER.

According to the investigations of Trautmann,[1] there appears to be an intimate and interesting relationship between the bacilli regarded as the cause of certain meat poisonings and paratyphoid bacilli. Both Trautmann, Schottmüller and B. Fischer, as well as de Nobele, regard all these organisms as belonging to the same group. Hitherto we have thought of paratyphoid bacilli only in connection with a rather mild kind of typhoid-like disease, and at first sight it seems somewhat far-fetched to attempt to place meat poisoning and paratyphoid under the same etiology. It may be pointed out, however, that while these bacilli are closely related, yet there are minor differences on part of the various races, and that differences in the clinical manifestations of the infections might be accounted for on the score of biologic differences in the organisms. The virulence of the bacilli and susceptibility of the patient are also highly important factors that should not be left out of sight. Trautmann, in considering this question, would put special stress on the difference in the conditions under which the infection takes place in meat poisoning and ordinary paratyphoid fever. In the case of poisoning, meat (improperly prepared, uncooked?) of infected animals is taken into the stomach, meat that often contains not only the bacilli perhaps, but also the toxic products of the latter. This is followed by acute and violent symptoms, e. g., vomiting and diarrhea, ending in early death, or recovery after, perhaps, protracted illness. In case of ordinary paratyphoid fever, the infection is established with a relatively much greater slowness, and the symptoms become apparent much more gradually. Trautmann observed, furthermore, that in the epidemics of meat poisoning there occurred certain cases that form transitions between the two types of infection, and he consequently regards typical meat poisoning as a hyperacute and paratyphoid as a subacute form of the same infectious disease. If this view is adopted generally, the pathogenic importance of paratyphoid bacilli will be increased greatly. In order to secure additional information in regard to these questions, all cases of meat poisoning should be studied with the greatest care from the bacteriologic point of view. It appears that in Germany epidemics of meat poisoning have followed the consumption of more or less improperly prepared meat of infected animals, and Trautmann suggests that in cattle paratyphoid organisms cause an epizootic after the nature of anthrax. This in itself is an interesting question in comparative pathology.

1. Zeitschr. f. Hyg. u. Infektionskr., 1903, xlv, 139; and 1904, xlvi, 68.

Medical News.

ILLINOIS.

Promotional Examination.—A promotional examination for senior physicians at Cook County Institutions, Dunning, will be held, April 14, 15 and 16.

Medicine Men Jailed.—"Drs." Wallace and Miller, itinerant medicine men who victimized Tazewell County farmers, were fined at Pekin, March 14, and in default of payment were committed to jail.

Golden Anniversaries.—Dr. and Mrs. William E. Gilliland, Coatsburg, celebrated their golden wedding, March 22.——McLean County Medical Society will celebrate its semi-centennial at Bloomington with a banquet, April 7, at which Dr. Franklin C. Vandervort, president, will be toastmaster.

Consulting Staff at Dunning.—The county board has confirmed the following appointments to the consulting staff of Cook County Institutions, Dunning: Internal medicine, Dr. Frank Billings; surgery, Dr. John B. Murphy; pathology, Dr. William A. Evans; insanity, Dr. Hugh T. Patrick, and tuberculosis, Dr. Arnold C. Klebs, all of Chicago.

Smallpox.—The appearance of two or three cases of smallpox at the Cottage Hospital, Peoria, has necessitated temporary closure of the institution, and quarantine.——Carlyle has six cases.——Seneca and Marseilles have discovered that the supposed chicken-pox which is prevalent there is smallpox.——Streator reports the smallpox epidemic at an end. There were 44 cases and two deaths.

Personal.—Dr. Henry C. Fairbrother, East St. Louis, was appointed by the governor, on March 28, a member of the Illinois State Board of Commissioners of Public Charities. The other medical member of the board is Dr. William Jayne of Springfield.——Dr. A. B. Middleton, Chatsworth, is seriously ill with pneumonia.——Dr. John E. Covey, Lexington, sailed for London March 22.——Dr. William P. Schirding, Palatine, returned from Vienna a few days ago.——Dr. John W. Colbert, Jacksonville, has been appointed physician of a Presbyterian hospital in Puerto Rico.

Chicago.

Still Sporadically Enforced.—Four individuals charged with violating the anti-spitting ordinance, were fined each $1 and costs, March 28.

Physician Exonerated.—Dr. Bruce T. Bowens, charged with having performed an operation which resulted in the death of Mrs. Minomi Chandler, was exonerated by the coroner's jury.

Again Pneumonia Leads.—During the week ended March 26, 156 of the 626 deaths reported, or 24.92 per cent., were due to pneumonia. Consumption caused 76 deaths, heart diseases, 50; Bright's disease, 42, and violence 36. The mortality shows an annual rate of 16.32 per 1,000.

University and Bellevue Alumni to Meet.—The fourth annual meeting and dinner of the Western Alumni Association of the University and Bellevue Hospital Medical College will be held at the Sherman House April 11. Professors Joseph D. Bryant and Egbert Le Fevre of New York will be the guests of the evening. Dr. David W. Graham, Chicago, is president of the association, and Dr. Willis O. Nance, 100 State Street, Chicago, is the secretary. Former students of Bellevue or of the University who have not received invitations to the meeting may do so by addressing the secretary.

Boil the Water.—The Department of Health announce that there will undoubtedly be an increase of typhoid fever and the acute intestinal diseases among those who drink untreated hydrant water. There had previously been noted an increase of the colon group of bacilli from a previous 35.7 per cent. to 56.5 per cent. of the examinations. This fortnight's increase is already reflected in the increased deaths from the acute intestinal diseases—from 14 during the week of March 19 to 31 during the week of March 26, or more than 120 per cent. Such an increase is a sure precursor of an increase of typhoid fever.

Warning Against Rabies.—The number of rabid dogs which have been killed during the last few weeks, brings from the department of Health the advice that the public should appreciate the importance of securing a dog that has bitten anyone and keeping him alive until it is positively known whether or not he is suffering from rabies. It also recapitulates the symptoms of rabies in dogs as follows:

Beware of a dog when it becomes dull and hides away; appears restless; always on the move and prowling; whose countenance is somber and sullen; walks with head down like a bear. Beware of one that barks at nothing, when all around is still. Beware of a dog that scrapes incessantly and tears up things. Look out for the dog which has become too fond of you and is continually trying to lick your hands and face. Beware, above all, of the dog which has difficulty in swallowing, which appears to have a bone in its throat, and one that has wandered from home and returns covered with dirt, exhausted and miserable.

INDIANA.

Smallpox.—During February 408 cases of smallpox were reported, with 5 deaths, from 34 counties. In the preceding month there were 480 cases and 8 deaths in 38 counties, and in the corresponding month of 1903 there were 889 cases, with 50 deaths in 59 counties.

Physicians Injured.—Dr. William H. Kluge, Indianapolis, sustained injuries to his spine by being thrown violently against a car platform by a lurch of the car.——Dr. Cortez M. Leeth, West Indianapolis, was beaten with knuckles in an attempted hold-up and rendered unconscious.

Prevalent Diseases.—Measles was the most prevalent disease in February; then follow, in the order given, bronchitis, pneumonia, influenza, tonsillitis, rheumatism, scarlet fever, typhoid fever, diphtheria, diarrheal diseases, erysipelas, whooping cough, cerebrospinal meningitis, dysentery, puerperal fever, cholera morbus and cholera infantum.

Registering Phthisis.—The State Board of Health has issued blanks to local health boards for complete reports of cases of tuberculosis. This follows the order requiring physicians to report all such cases, as other contagious or infectious diseases are reported. It is expected, from these reports, and those of inspectors, to have a complete history of each case.

Increase in Pneumonia.—The increase in pneumonia is alarming, the total deaths in Indiana in February being almost twice as many as from tuberculosis. The pneumonia death rate in the cities is 417 per 100,000, and in the country 323. Of the total pneumonia deaths 353 were females and 429 males, and 155 were children under one year of age. A careful study of the matter points to the conclusion that the pneumonia increase attended the increase in measles and influenza, and was not caused by weather conditions.

February Deaths.—The total number of deaths in February was 3,477, equivalent to an annual rate of 17.4 per 1,000. In the corresponding month last year the deaths numbered 2,677, or 13.8 per 1,000. In January there were 3,177 deaths, a rate of 14.8 per 1,000. The increase in pneumonia is responsible in a degree for this increase in deaths. Some important causes of death were: pulmonary tuberculosis, 365; typhoid fever, 60; diphtheria, 32; scarlet fever, 23; pneumonia, 711; influenza, 116; cancer, 78; violence, 142, and smallpox, 5. The city death rate was 21.7, and the country rate 15.1. The cities present the highest death rates in consumption, typhoid fever and pneumonia. The country presents a higher death rate in influenza. Two of the smallpox deaths occurred in cities, and three in the country.

Personal.—Dr. David G. Linville, Columbia City, has entered on his eighty-third year.——Dr. Horace Wardner, superintendent of the Home Health Club Hospital and Sanitarium, La Porte, has resigned on account of ill health, and has been succeeded by Dr. Hulbert Fuller of Chicago.——Dr. and Mrs. John W. Younge, Fort Wayne, sailed, March 8, on a trip to the Mediterranean and the Holy Land.——Dr. William Cluthe, Tell City, has been appointed secretary of the Perry County Board of Health, vice Dr. James B. Bennett, Derby.——Dr. David S. Stanton, Portland, secretary of the local board of health, 82 years of age, is said to be the oldest health officer in Indiana.——Dr. Stanley W. Edwins, Elwood, has given up practice, on account of ill health.——Dr. S. F. Kincaid, Taylorsville, has been appointed health officer of Bartholomew County.——Dr. Homer C. Stalker, Salem, has succeeded Dr. Theodore C. Sargent, Lafayette, as chief of the medical staff of the Indiana State Soldiers' Home, Lafayette.——Dr. J. Edwin Showalter has been made secretary of the Waterloo Board of Health, vice Dr. Frank Broughton, resigned.

IOWA.

Drugless Healers Exempt.—Judge J. H. Richards, Webster City, has ruled, in the case of the State of Iowa against "Dr." J. Wilson, Edmunds, for alleged illegal practice of medicine, that "drugless healers" do not come under the provisions of the medical practice act.

Typhoid Germs in Cedar River.—Drs. Henry Albert and Walter L. Bierring, to whom was entrusted the task of determining the source of typhoid fever infection in Waterloo, have demonstrated that the typhoid germs came not from infected wells, but from the Cedar River, the source of the water supply of the city.

State Hospitals.—The senate has voted an appropriation of $125,000 for the establishment of a state hospital for inebriates at Knoxville. The former industrial home for the blind will be used, and new buildings erected. The bill provides that treatment is not to exceed three years.——The home committee on appropriations has passed a bill devoting $50,000 to the erection of a state hospital for consumptives.

Personal.—Dr. John G. Mueller, Iowa City, has been appointed examining surgeon of the university battalion, vice Dr. J. W. Harriman, deceased.——Dr. August Anderson, Sioux City, who was seriously injured in an acetelene gas explosion, February 29, is making a satisfactory recovery.——Dr. Lee W. Dean, Iowa City, professor of otology, laryngology and rhinology in the University of Iowa, has been granted indefinite leave of absence on account of ill health.——Dr. William L. Miller is critically ill at his home in Des Moines.

LOUISIANA.

Commencement.—Flint Medical College, New Orleans, held its fifteenth annual commencement exercises, March 11, graduating a class of five. The annual address was delivered by J. Madison Vance, and Dr. F. H. Knight presented the diplomas.

War Against Mosquitoes.—The State Board of Health has transmitted copies of resolutions adopted March 1, to all physicians in the state, emphatically urging them "and all other persons attending patients with fever to carefully keep a well-tucked bar over such patients, especially during the first four days of their illness, and as far as practicable to destroy mosquitoes about the patient's bed and room. This precaution should be particularly observed from April 1 to November 30."

Personal.—Dr. T. A. Jones has been elected secretary of the faculty of Flint Medical College of New Orleans University, vice Dr. A. J. Lopez, resigned to accept the chair of neurology.——Dr. Clarence L. Horton, New Orleans, medical inspector of the State Board of Health, has withdrawn from the service on account of his removal from the city.——Dr. Holt King, Baton Rouge, has been appointed medical examiner for Louisiana at Ceiba, Spanish Honduras, and Dr. J. S. Aliston, Natchitoches, medical examiner at Belize.——Dr. Lester J. Williams, Baton Rouge, has been appointed marine medical inspector on ships plying between New Orleans and Central America.——Dr. Harvey J. Clements, New Orleans, is taking a vacation of five months.

MAINE.

Smallpox.—Calais has several cases of smallpox, and St. Stephen is enforcing a strict quarantine and vaccination.

"Holy Ghosters" in Trouble.—Rev. T. W. Sanford, leader of the "Holy Ghost and Us" Society in Auburn, was found guilty of cruelty in compelling his little son, aged 6, to fast 72 hours. Trial on a charge of manslaughter because he refused

to allow a physician to be called to another boy, 14 years old, who later died of diphtheria, resulted in a disagreement of the jury.

Society's Semi-Centennial.—The Penobscot County Medical Association celebrated the conclusion of the first half century of its existence by a banquet at Bangor, February 22, at which about 75 were present. President Dr. Daniel McCann called the meeting to order and designated Dr. Augustus C. Hamlin as toastmaster. Dr. Daniel A. Robinson reviewed the history of the organization; Dr. George A. Phillips, Bar Harbor, read an original poem, and Dr. Augustus S. Thayer, Portland, president of the Maine Medical Association, made a plea in favor of organization.

MARYLAND.

Refuse Appropriation to Colleges.—The legislature has decided not to grant the appropriation of $4,000 asked for by each of the medical colleges of Baltimore.

No Library Building.—The medical and chirurgical faculty failed to get any appropriation for its library building from the legislature. It is probable the application will be renewed two years hence.

Baltimore Deaths.—Two hundred and thirty-six deaths were reported last week against 200 last year, being an annual death rate of 22.10 per 1,000; white 18.77, colored 40.24. The principal causes of death were pneumonia, 46; consumption, 36; Bright's disease, 13; cancer, 11; bronchitis, 10; influenza, 8; scarlet fever, 5; and typhoid fever, 3.

Appropriation Bills for Hospitals.—Bills are before the legislature for appropriations of $200,000 to complete Springfield State Hospital for the Insane; $66,000 for the Maryland Asylum and Training School for the Feeble-minded, $53,000 to complete buildings at Maryland Hospital for the Insane, and $10,000 for the Cambridge Hospital. The omnibus appropriation bill, recommended by the ways and means committee, and introduced into the house, provides the following annual appropriations: Maternity of College of Physicians and Surgeons, $3,000; Nursery and Child's Hospital, $2,500; Hebrew Hospital, $4,000; Home for Incurables, $2,500; Hospital for the Women of Maryland, $4,000; Baltimore City Hospital, $7,000; Maryland General Hospital, $5,000; University Hospital, $5,000; Maryland Lying-In Hospital, $3,000; St. Joseph's Hospital, $5,000; Franklin Square Hospital, $2,500; Union Protestant Infirmary, $5,000 (the last seven on condition of taking a certain number each of state patients); St. Agnes Hospital, $3,500; Hospital for Relief of Crippled and Deformed Children, $5,000; Provident Hospital (colored), $1,500; Hospital for Consumptives, $5,000; Baltimore Eye, Ear and Throat Hospital, $2,000; Southern Dispensary, $500; Johns Hopkins Hospital, $20,000; Home and Infirmary of Western Maryland at Cumberland, $7,500; Peninsula General Hospital, Salisbury, $5,000; United Charities Hospital, Dorchester County, $6,000; Johns Hopkins University, $25,000; Frederick City Hospital, $3,500; Northenstern Dispensary, $1,000; Emergency Hospital, Annapolis, $2,500; Washington County Hospital, Hagerstown, $6,000; Silver Cross Home for Epileptics, Port Deposit, $1,500, and West End Maternity, $1,000. The annual appropriations are for two years, or until the next legislature meets. The omnibus bill being introduced is equivalent to the above appropriations being actually made.

MASSACHUSETTS.

Mulcted for Unauthorized Autopsy.—The courts have decided that permission for an autopsy on his child was not granted by Louis Bromberger, and that the Massachusetts General Hospital must pay him $50. Suit for $2,000 was brought.

Additions to Asylums.—The Massachusetts senate will appropriate about $300,000 to be used for new buildings and improvements at the Westboro Insane Hospital, the Taunton Insane Hospital and the School for Feeble-Minded Children.

Hospitals Benefit.—The Salem City Hospital benefits as residuary legatee of Miss Hannah K. Grant of that city, her sister having the use of the property during life. The fair held at the Hotel Vendome, March 26 and 27, netted nearly $5,000 for the Infants Hospital, Boston.

Golden Wedding.—Dr. and Mrs. Joshua Bailey Gould of Somerville, Mass., celebrated their golden wedding, March 23. Dr. Gould is nearly 85 years old, and after practicing medicine in Templeton and adjoining towns came to West Somerville in 1874, and continued practice there till his eightieth birthday, a period of active practice of over 50 years.

Surgeon General Resigns.—Brigadier-General Robert A. Blood, Charlestown, surgeon general of the Massachusetts Volunteer Militia, has resigned, to take effect May 2. It is expected that Lieutenant-Colonel Otis H. Marion, Brighton, will succeed him. Dr. Marion joined the First Regiment in 1883, becoming medical director of the First Brigade in 1897. This position he has since held, except for a year, 1898, when he went to the front with the Sixth Infantry

Personal.—Dr. Harold Williams, dean of Tufts Medical School, who with his family has spent the winter in France is expected home in May.——Among Boston physicians who will spend Easter at Washington, Baltimore or Philadelphia are Drs. Dudley Williams, Whitredge Williams, John P. Reynolds, Moses Douglass, and Henry Barton Jacobs.——Dr. Arthur E. Austin, professor of medical chemistry and toxicology in Tufts Medical School, is studying in Ludwig's bio-chemical laboratory, Vienna.

MINNESOTA.

Epidemics in Minneapolis.—It is reported that there are more than 200 cases of typhoid fever in Minneapolis, and that the number is steadily increasing. At least 14 deaths from this cause occurred during February.——During the week ended March 21 17 new cases of smallpox were reported in the city, a number of which were in Augsberg Seminary.

Personal.—Dr. Frederick A. Dunsmoor has resigned as medical director of Asbury Hospital, Minneapolis, and Dr. J. Warren Little has been appointed to succeed him.——Dr. Jacob E. Schadle, St. Paul, has been appointed professor of rhinology and laryngology in the College of Medicine and Surgery of the University of Minnesota, Minneapolis, to succeed Dr. Winfield S. Laton, Minneapolis, resigned.

Would Avoid Notoriety.—The Brown and Redwood County Medical Society, at its last meeting, put on record the desire of its members to avoid newspaper notoriety by passing the following resolutions:

Resolved, That the secretary be authorized to request editors not to mention the name of any physician in connection with any case, and be it further

Resolved, That a copy of this resolution be sent to all newspapers in Brown and Redwood counties.

Must Report Births and Deaths.—A circular has been sent to physicians and county officials calling their attention to the law requiring parents and householders to notify the county clerk or health officer of all births and deaths of members of their households under penalty of a fine varying from $5 to $25, and requiring physicians to report within ten days all births and deaths, and midwives to report all births under a penalty of fine or imprisonment.

NEW YORK.

Getting in Line.—Orange, Richmond and Essex county medical societies have ratified the union of the state medical society and association.

Albion's Water Supply Impure.—In a report to the State Department of Health Professor Olin Landreth says the Albion Water Company is supplying canal water to the village, and that the water is a menace to health, and that its use must be discontinued.

Object to Use of Summer Resort for Insane.—People living along the Great South Bay have presented a petition to the state lunacy board begging it to alter its intention of accommodating the mildly insane at the Surf Hotel on Fire Island, as it would greatly interfere with their profits during the summer, which are derived from conveying parties to this island on picnics and excursions.

New Bills.—There is a bill now before the legislature to prohibit the use of cocain.——Mr. Platt has also introduced a bill requiring that the formulæ must be printed on the wrappers of patent medicines.——Mr. Nye's bill to regulate the practice of optometry also had a hearing.——Senator Hawkins has introduced a remarkable bill regulating the practice of osteopathy. It provides that the board of regents shall conduct examinations for those qualified to practice. The exemptions are precisely the same as those made in the Wilcox bill for optometry. In a slightly different form this measure has been introduced into several legislatures, but has never emerged from committee.

State Lunacy Commission Bill.—The senate finance committee reported favorably on Senator Malby's bill empowering the commissioner in lunacy to enter into an amicable arrangement with the emigration authorities of the government, by which a more careful inspection may be made as to the mental condition of immigrants landing at the port of New York. On the completion of such an arrangement the state commission is authorized to appoint a board of alienists for the examination

of insane, idiotic, imbecile and epileptic immigrants, to consist of a chief examiner at a salary of $5,000, and two assistants at a salary of $3,000 each. The commission in lunacy believe that there is no more serious economic question confronting taxpayers to-day than that pertaining to the immense flood of immigration. Of the aliens landing at Ellis Island, 44 per cent. give New York City as their prospective permanent home, therefore it can be seen that the usual percentage of defectives among this class will become a permanent burden on the state. At the present time there are admitted each week to the Insane Retention Pavilion of Bellevue Hospital, at least 4 recently landed immigrants who show marked evidences of mental derangements.

Buffalo.

Personal.—Dr. Roswell Park left for Berlin to attend the annual meeting of the German Surgical Society. From Berlin he will visit Mikulicz at Breslau and MacEwan at Glasgow. ——Dr. David E. Wheeler has been appointed visiting genito-urinary surgeon at the Sister's Hospital.

New York City.

Vital Statistics for 1903.—Health Commissioner Darlington reported for the year 1903 that there were 67,984 deaths, 94,755 births, and 31,174 marriages. Pneumonia caused 9,174 deaths; tuberculosis, 9,403; Bright's disease, 5,636, and violence, 4,068. There were 805 suicides.

Instruction in First Aid.—The board of education has arranged for the delivery of a series of free lectures to be given in the boroughs of Manhattan, Brooklyn and Queens. Those who have taken the course and passed a satisfactory examination will be entitled to a certificate and may wear the first-aid insignia.

City Hospitals Overcrowded.—The records of the twenty largest hospitals in the city, taken March 26, show that there are only 56 vacant beds in hospitals, with an aggregate capacity of 5,446. Were it not for the recent opening of the new Mount Sinai Hospital, the accommodations would be totally inadequate to the number of patients.

Personal.—Dr. Rudolf Rapp has been appointed to the staff of the Craig Colony for Epileptics at Sonyea, N. Y.——Dr. Hermann M. Biggs recently presented the exhibit prepared by the New York Board of Health for the St. Louis Exposition, at the Academy of Medicine.——Dr. William T. Bull has practically recovered from his recent illness.

County Society Election.—At the meeting March 21, the following officers were elected: President, Dr. Francis J. Quinlan; vice-presidents, Drs. Henry A. Dodin, and S. Busby Allen; secretary, Dr. William R. Stone; corresponding secretary, Dr. John J. Nutt; treasurer, Dr. Charles E. Denison; executive committee for three years, Dr. Alexander Lambert; for two years, Dr. Frederick W. Loughran. Sixty fellows and sixty alternates were also appointed for the state association.

Jamaica Hospitals Fight.—The differences between the Jamaica and St. Mary's hospitals of Jamaica, Long Island, over the proposed redistribution of the districts of the two hospitals are about to be investigated. At present the Jamaica Hospital receives calls from all points south of Fulton Street, Jamaica, which gives it the railroad cases, and against this St. Mary's Hospital protests. It is charged against the Jamaica Hospital that the orderlies have been sent out on ambulance calls to act as physicians.

Loomis Laboratory vs. New York University.—When the amalgamation was made between the New York University (medical department) and Bellevue Hospital Medical College the Loomis laboratory went with the amalgamation. The university trustees sought to impress a trust on the laboratory property, asserting that the laboratory was a part of the university itself. In the Supreme Court, Justice Truax has decided that the university is not entitled to a reconveyance of the property, and this decision has been upheld by the Appellate Division, whose judgment is now affirmed by the Court of Appeals.

OHIO.

Typhoid Decreasing.—In the week ended March 19, only 19 deaths from typhoid fever occurred in Cleveland, and 54 new cases were reported.

Physicians Want Representation.—On March 28 a resolution was passed by the Academy of Medicine, Cincinnati, requesting the mayor to appoint a member of the medical profession to fill the vacancy on the health board. At present the board is composed of six members, not one of whom is a physician.

Personal.—Dr. Walter W. Brand, health officer of Toledo, has been given an increase in salary from $1,800 to $2,800 a year. ——Dr. Andrew C. Kemper, Cincinnati, has been admitted to the Soldier's Home, Dayton.——Dr. Joseph A. Murphy, Columbus, has been appointed coroner of Franklin County, vice Dr. Oliver W. Lindsay, deceased.

Hospital Loses by Technicality.—By the will of Benjamin Wood Davis, the Jewish Hospital, Cincinnati, is bequeathed $10,000. Unfortunately the will was made less than one year ago, and therefore this bequest is void under the statutory provision which requires that a will must have been made more than a year before death to make such bequests valid.

Academy Election.—The election of officers of the Cincinnati Academy of Medicine, held March 7, resulted as follows: President, Dr. Simon P. Kramer; vice-presidents, Drs. John M. Withrow and Julia W. Carpenter; secretary, Dr. Stephen E. Cone; treasurer, Dr. M. Agnus A. Tate; librarian, Dr. Arch. I. Carson; trustees, Drs. E. Gustav Zinke, James F. Heady, and David I. Wolfstein; delegates to the state medical association, Drs. Charles A. L. Reed, Simon P. Kramer, Louis Schwab, and Mark A. Brown, and alternates, Drs. Charles L. Bonifield, Louis Stricker, David I. Wolfstein and George A. Fackler.

PENNSYLVANIA.

Physicians' Injuries.—Dr. F. Otis Bryant, Chester, while returning from a call in his carriage, was struck by a trolley car and severely injured, but not fatally.——Dr. George I. McLeod, Ardmore, whose feet were run over by a railroad train last December, sustaining injuries which necessitated double amputation, is now able to be about on artificial feet.——Dr. William H. Warder, one of the oldest practitioners of Philadelphia, was severely injured by being thrown from his carriage, March 23.

Reorganization.—The State Board of Health will issue a circular letter to the various medical societies throughout the state, asking them to aid in obtaining legislation to reorganize the system of health reports. Dr. Lee, the secretary, will suggest that the various medical societies throughout the state adopt resolutions urging on senators and representatives the importance of enacting laws to establish a health officer in every county, and a deputy health officer in every township. These representatives shall be directly responsible to the State Board of Health. All incurable diseases are to be reported both by physicians and householders, and he further suggests that all water companies be placed under state supervision.

Insane Asylum Condemned.—Investigations by the grand jury and representatives of the state lunacy board reveal that the present buildings of the Schuylkill County Insane Asylum are entirely overcrowded and unfit for occupancy, and that the sanitary conditions are of the most ancient description. There are 250 insane patients to be cared for by Schuylkill County, and 149 of these are being treated in the state institution in Danville. Dr. George I. McLeod, president of the state lunacy board, says that much better results could be obtained if the "County Care Act" were taken advantage of. By this act the county insane asylum would come under state control, and at the same time receive from the state $1.50 per week for each patient. In order to secure this state aid the county must provide suitable buildings.

Philadelphia.

Bequests.—By the will of Albert J. Cliff there will revert at the expiration of trust the residue of $45,000 to the Methodist Episcopal Home for the Aged and Methodist Hospital, share and share alike.——By the will of Mary P. Wernwag the sum of $60,000 is devised in trust for the benefit of the Home of the Merciful Saviour for Crippled Children.

Banquet to Dr. Shoemaker.—On March 22 Dr. John V. Shoemaker, professor of therapeutics in the Medico-Chirurgical College, was entertained by the faculty of the college in celebration of the thirtieth anniversary of his entrance into medical practice. Dr. Shoemaker was presented with a silver shield containing the seal of the college and the names of his associates in the faculty.

Philadelphia Hospital Examinations Deferred.—As a result of an interview by the dean of the different medical colleges with Mayor Weaver, regarding the date of the examinations for internes, the examinations will be held on or about May 10, instead of a month earlier, as was first announced. This arrangement is made in order not to conflict with the student examinations in the colleges.

Hospital Improvements.—Two charitable institutions of the city will be greatly improved soon. The first is the Home for

Incurables, where a pavilion for the treatment of cancer is to be erected. The building will be of brick and be equipped with all devices for comfort and care of the patients. The second institution is the Episcopal Hospital, and estimates are being taken for the erection of the Aspinwall ward.

Lectures on Tropical Diseases.—Under the auspices of the University of Pennsylvania, Major Guy L. Edie, U. S. Army, is delivering a series of lectures on tropical diseases. His first lecture on March 23 was devoted principally to yellow fever. He described the general character, symptomatology and treatment of the disease, and devoted some time to the discussion of the part played by the mosquito in the propagation of this malady. He said that yellow fever could now be placed in the category of preventable diseases. In speaking of the mosquito he said that the decline of the hibernation period of the mosquito marked the spread of yellow fever. His second lecture was delivered on March 25, and the talk was devoted to the discussion of beri-beri, Asiatic cholera, and bubonic plague. Major Edie will deliver a series of ten lectures, two each week, on Wednesdays and Fridays. The medical profession of the city is invited to attend.

Health Report.—Typhoid fever shows no signs of abatement. Indeed, there is a slight increase this week over last week's high figures, those for the week drawing to a close being 148 cases and 17 deaths, compared with 141 cases, and 21 deaths for the previous week. There is also an increase in scarlet fever, total cases reported being 116, compared with 101 for the previous 7 days. There is a slight increase in the number of smallpox cases reported; 35 new cases were reported during the week, an increase of 5 over the preceding 7 days. This is attributed to a local outbreak of 11 cases in one section of the city. The deaths from all causes during the week number 585, being a decrease of 49 from those of last week, and an increase of 40 over those of the corresponding week of last year. Pneumonia's ravages have decreased but slightly since the first of the year, when the deaths each week were from 100 to 125. This exceeds the number of deaths caused by consumption, which heretofore have headed the death list in point of numbers. The deaths from consumption during the past seven days were 60.

Lecture to Teachers.—Dr. Jay F. Schamberg addressed the teachers and principals of the schools on medical inspection of the public school. He said that in the New York schools more than 3,000 children had been found with contagious diseases of the skin, and nearly 4,000 with diseases of the eye. He declared, therefore, that regular inspection by competent physicians was imperative to protect the health and welfare of school children. He pointed out the fact that it was a common observation that contagious diseases, such as scarlet fever, diphtheria and the like, increased after the opening of the schools, and decreased after the close. He said that children commonly attend school during the developmental periods of various contagious diseases, and that such patients are not only apt to communicate the disease to a considerable number of school children, but each child thus infected may carry the disease home and transmit the same to others. He said that Philadelphia was far behind in the matter of safeguarding the health of school children, but that the city was beginning to awake to the situation, and has just completed the organization of a medical corps, so that the inspection of school children will very shortly begin.

SOUTH DAKOTA.

Schools Reopened.—The public schools at Bridgewater, which were closed for three weeks on account of an epidemic of diphtheria, have been allowed to reopen, and public gatherings to be resumed.

Itinerant Appeals.—"Dr." Charles Cram, head of a medicine show company, who was arrested in Vermillion recently for selling medicine contrary to law, found guilty and fined $90, has appealed to the circuit court.

Uncertificated Oculist Guilty.—M. F. Yegge, Huron, has been found guilty of violating the state law regulating the practice of medicine, by practicing as an oculist and prefixing "Dr." to his name without first having obtained a certificate from the State Board of Medical Examiners.

Sixth District Society Meets.—Dr. E. Frank Reamer, Mitchell, secretary of the Sixth District South Dakota Medical Society, writes: The regular quarterly meeting of the Sixth District South Dakota Medical Society was held in Mitchell, March 3. There was a smaller attendance than usual, but some excellent papers were read and freely discussed. Dr. Van Buren Knott, Sioux City, Iowa, was the guest of the evening, and read a paper on "The Open Treatment of Simple Fractures." Two or three unusual clinical cases were presented by Drs. Bowen and Reamer. After the program a banquet was served at the Waverly Hotel. Medical organization in this district is very nearly complete, and the state generally is in good condition. The state association meets at Redfield June 1 and 2.

TENNESSEE.

Examinations.—The State Board of Medical Examiners will hold examinations in Knoxville, Memphis and Nashville, April 6 and 7.

Addition to Hospital.—The capacity of Mercy Hospital, Nashville, is to be increased by the addition of a new wing containing fifteen rooms, which will make room for 20 more patients.

City in Two States.—Dr. Hardin W. Reynolds, a homeopathic practitioner of Bristol, was fined $50 and costs on the charge of practicing medicine in Bristol, Va., without a license. Physicians in this state-line town are required to take out licenses in both Tennessee and Virginia.

To Enforce Law.—Four physicians of Bradley have been fined for violating the law requiring practitioners of medicine to have their licenses registered with the county clerk. In Chattanooga, 25 physicians were fined for the same offense; in Cocke county 17 warrants have been issued, and in Polk County 12 have paid fines, and some others have retired from practice. The attorney of the state board estimates that there are between 1,000 and 1,500 violators of the law in the state.

UTAH.

Salt Lake Deaths.—During 1903, 745 deaths occurred, a rate of 9.93 per 1,000. Of these 39 were due to diphtheria, 21 to typhoid fever, 8 to scarlet fever and 2 to smallpox.

Society Election.—At the annual meeting of Weber County Medical Society in Ogden, Dr. George A. Dickson was elected president; Dr. Chester E. Coulter, vice-president; Dr. Haymond J. Powers, treasurer; Dr. Amasa S. Condon, librarian, and Dr. Harry B. Forbes, secretary, all of Ogden.

Farmer's Doctor Fined.—Andrew Peterson of Logan, masquerading as "Dr." J. S. Gray of London, who has been victimizing farmers in the neighborhood of Ogden, was arrested, March 16, charged with practicing medicine without a certificate, and was fined $10, or ten days' imprisonment.

Would Collect Vital Statistics.—The State Board of Health is sending out circular letters to the different boards of county commissioners asking them to apportion their respective localities into health districts with suitable inspectors, and to appoint registrars for the collection and preservation of vital statistics. Sample blanks of death certificates accompany the circular letters.

GENERAL.

Second Congress of French-Speaking Physicians of America.—This congress is announced to convene, June 28, at Montreal, in the halls of Laval University.

The American Neurological Association will meet at St. Louis September 15 to 17, and this will be immediately followed by the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19.

Inspect Panama Canal Route.—The members of the Panama Canal commission have left for Colon to inspect the route of the canal. They were accompanied by Col. William C. Gorgas, assistant surgeon general of the Army; Dr. Louis La Garde of the medical department of the Army, and Dr. John W. Ross, medical director of the Navy.

Navy Medical School Graduates.—Thirty-one members of the graduating class of the Navy Medical School received their diplomas, March 21, in the lecture hall of the National Museum. The presentation was by Mr. Charles H. Darling, Assistant Secretary of the Navy, and Secretary Moody made the principal address. Admiral Rixey followed with some practical advice.

CANADA.

To Furnish a Room.—The Victoria Trades and Labor Council will furnish a room in the Strathcona wing of the Royal Jubilee Hospital.

To Prevent Hospital Abuses.—Hereafter provincial patients will only be admitted to the Isolation Hospital at Victoria on guarantee of payment for same by the provincial government.

Hospital Crowded.—What to do with chronic patients at the Provincial Royal Jubilee Hospital, Victoria, is a matter of some

concern. The number of patients admitted during February was 87; the number treated, 141.

New Consumption Hospital.—Calgary, N. W. T., is to have a sanatorium for the treatment of pulmonary tuberculosis under the charge of Dr. Ernest Wills. The climate around Calgary is considered excellent for the purpose.

A Hospital for Ottawa Consumptives.—Dr. Moore, secretary of the Canadian Association for the Prevention of Tuberculosis, states that the old Contagious Disease Hospital in Ottawa is to be converted into a sanitarium for consumptives. Negotiations are now under way, and a wealthy citizen of Ottawa has promised to donate the money to remodel the building.

Ontario Law and the X-Ray.—An Ontario high judge has just decided that the law can not force a man to submit to an *x*-ray examination. A farmer was suing the Toronto Street Railway for damages for injuries sustained in a street railway collision, and the company wanted to have the man submit to an *x*-ray examination. He refused, stating that he was afraid he might die under the operation, as he had read of a similar occurrence somewhere in the states.

Canada Retains the Cigarette.—A resolution was before the Canadian house of commons March 23, to prohibit the manufacture, importation and sale of cigarettes, which secured a rather long, if not profitable discussion. Last year a similar resolution was carried on a vote of 103 to 48, but owing to some irregularity in the measure it was subsequently ruled out. The sponsor of the measure this year quoted Sir William Hingston, Montreal, and Dr. Charles Sheard, M.H.O., Toronto, as representatives of the medical profession who had pointed out the dangers and evils of the habit of cigarette smoking. The production of cigarettes in Canada is increasing enormously, having gone up from 138,000,000 in 1902 to 178,000,000 in 1903. The resolution was opposed by both the prime minister, Sir Wilfrid Laurier and Mr. R. L. Borden, the leader of the opposition. No vote was taken thereon, and the subject is practically shelved for the present session, as according to the rules of the house it has been relegated to the bottom of the list.

FOREIGN.

Another Prize for Finsen.—The Edinburg University has bestowed the Cameron prize on Prof. Niels Finsen for the most important work in practical therapeutics of late years.

Memorial to Schede.—A memorial has recently been erected to Max Schede in the grounds of the clinic at Bonn, the seat of his labors since 1895. The address was delivered by his successor, Professor Bier.

Prize for Pamphlet on Tuberculosis.—Dr. M. Salomon has received the Alvarenga prize from the German Hufeland Society for his pamphlet on "Tuberculosis as a Disease of the Masses and Measures to Prevent it."

The Quadrennial Polish Medical Congress Postponed.—We learn inofficially that as seventy Polish physicians have left for the seat of war in the east, the congress announced to open at Lemberg in July has been abandoned for the present.

Ankylostomiasis in a German Garrison.—The new recruits entering the garrison at Metz last fall evidently brought ankylostomiasis with them as numerous cases have been discovered. The subjects frequently have to be dismissed as incapable of military service, even after long observation and treatment.

Koch's Tropical Research.—Robert Koch is prolonging his stay in South Africa for the purpose of studying a horse disease, the *Pferdesterbe*. He goes to Dar-es-Salam in April to introduce his method of treating the cattle plague, which has proved so effectual in southern Africa. He is expected in Berlin before the end of June, when his leave of absence expires.

Italian Physiologists as Senators.—Professor L. Luciani of Rome and Professor A. Mosso of Turin, both famed for physiologic research, have been appointed senators of the realm in Italy. Luciani is now 62 years of age, while Mosso is four years younger. Mosso was called to Moleschott's chair at Turin on the removal of the latter to Rome, while Luciani was Moleschott's successor at Rome.

Price of Diphtheria Antitoxin in Europe.—The new Behring Serum Institute which is planned for Germany is not to be a government institution to monopolize the production of serums, as it is considered best to leave their production in private hands to stimulate competition and perfection. The price of diphtheria antitoxin is high, a single dose costing about eighty-five cents, while in Denmark, where the production is a government monopoly, the dose costs only eight cents.

German Society for Repression of Venereal Disease.—The annual meeting of this new society was held at Berlin March 6. The membership has now reached 3,500, and there are twenty local branches in various German cities. The warning circular which has been distributed by the society among young men has been denounced by certain persons because it referred to preventive measures and advised that a physician should be consulted in regard to them. The critics asserted that this clause ought to be stricken out in the interests of morality, but after a long discussion the objections were withdrawn.

The Madeira Islands as a Health Resort.—Dr. Pannwitz of Charlottenburg is manager of the new German company formed to erect a sanatorium on one of the Madeira Islands. Prince Carl von Hohenlohe obtained the concession from the Portuguese government and a company has been formed with a capital of $200,000 to carry on the enterprise. The executive committee includes the physicians B. Fränkel of Halle, Rumpf of Friedrichshain, Wolf of Reiboldsgrün, Römer of Marburg, and Lencastre of Lisbon. The party sailed March 10 on the steamer "Eleanore Wörmann" to Funchal to make arrangements for organizing a health resort on a large scale on this island.

Tribute to Professor Cornil of Paris.—The age limit—65—for the service as hospital physician having been reached, Cornil was retired last year, and his term of service in the senate expired at the same time, but he is still professor of pathologic anatomy, as for twenty-two years. His friends recently gathered to pay tribute to his life of devotion to science and progress. He was presented with a portrait medallion, and in his response dwelt on his life's ideal as "progress in all its forms, scientific, political and social." He urged that science and politics should join hands, each aids and supplements the other, and cited experiences to show the facility with which reforms can be realized when certain members of the profession are regarded as important factors in the political life of a country.

Silver Jubilee of the Cystoscope.—Prof. Max Nitze of Berlin received an ovation from his friends, pupils and fellow specialists the world around, March 9, 1904, the twenty-fifth anniversary of the day on which he first exhibited his cystoscope before a medical society in Vienna. He was presented with an album containing the photographs of specialists in urology and also with a *Festschrift* and telegrams of congratulation signed by many specialists, surgeons, clinicians and gynecologists, as well as urologists of various countries. He is now in his fifty-sixth year, and notwithstanding the revolution in urology induced by his invention he has never received due academic recognition. He was 41 before he won the title of privat docent, and 52 before the position of professor extraordinary was conferred on him. Even now, as there is no chair of urology at Berlin, he has to deliver his lectures and train his pupils in his private establishment.

The Antimalaria Campaign of the Italian Red Cross Society.—The annual report just published reviews what has been accomplished during the four summer campaigns undertaken by this society. In 1900 about 31 per cent. of the population in the ultramalarial districts contracted malaria. This proportion has been gradually reduced until last year only 11 per cent. were affected. The first year the society had no quinin at its disposal; the second year it was able to give it to 925 patients; the third year to 1,272, and last year to 7,853. It had seven stations on the Campagna with 40 physicians and 32 nurses. Much better results would be attained if the society were able to keep up the quinin treatment during the winter, but the more than 12,000 laborers who flock to the Campagna during the harvest time scatter to all points of the compass afterward. The expense of the campaign last year was less than $9,000, part of which was contributed by the king and part by the city.

The Virchow Endowment Fund for Scientific Research.—On the occasion of Rudolf Virchow's sixtieth birthday about $20,000 was collected and presented to him as an endowment fund for scientific research. This sum was increased by various gifts and subscriptions until in 1901 it reached $36,000, and the further contributions at his eightieth birthday raised it by $16,000 more. This sum was placed entirely at his disposal, and since his death his heirs have formally given it over as an endowment fund to a board of seven trustees, to include five delegates from scientific societies, the mayor of Berlin, and a practical business man to serve as treasurer of the fund. The endowment states that the interest of the sum is to be applied to the aid of research in anthropology, ethnology, archeology, comparative philology and medical geography, by subsidies for travel, by aid in researches, excavations, etc., and in publica-

tion and illustration of works on these subjects or in the purchase of material, apparatus, etc. Such undertakings as have an established plan and estimate of expenses are to be given the preference.

The War from the Russian Medical Standpoint.—Dr. Weissbein, in an editorial in the *Russische med. Rundschau*, remarks that all entertainments have been abandoned in Russia, and attention is concentrated solely on the furtherance of the war and mitigation of its hardships. Physicians are giving public lectures to instruct the people in the principles of caring for the sick. Post-graduate courses in military surgery have been organized at all the universities and large numbers of physicians are hastening to the seat of war. It is generally understood that the conditions there are extremely unfavorable and that it will prove an arduous task to protect the soldiers against epidemics. Malaria prevails in the many swampy districts, and the unhygienic surroundings invite typhoid fever. Fortunately, he adds, the Russian soldier is extremely resistant and is able to undergo the severest hardships without losing courage. He is likewise accustomed to a vegetable diet and to deprivations of many kinds. The troops are well cared for on the long railroad trip, with abundance of hot tea and two warm meals a day. An army of trained nurses and attendants is ready to afford relief the moment its services are called on, and money is pouring in to supply every need.

Approaching International Congress of Ophthalmology.—THE JOURNAL, Aug. 22, 1903, page 503, published the particulars in regard to this congress, and due notice of the exhibition to be held therewith was given recently on page 720. The Swiss railways and boat lines offer low special rates to the members of the congress, and the town of Lucerne promises lavish hospitality. Owing to the death of Professor Pflüger the committee of organization now comprises Snellen of Utrecht, Barde of Geneva, M. Dufour of Lausanne, Haab of Zurich and E. Landolt of Paris, with Mellinger of Basle and Siegrist of Berne. The latter has charge of the exhibition, while the membership fee and all MS. should be sent to Professor Mellinger of Basle. Communications received before May 1 will be printed and distributed to members and discussed at the meetings. Those received after this date will be compelled to await their turn afterward. The printed summaries will be sent to the members with their tickets in receipt for the subscription ($5). The official opening has been advanced five days, and will be on September 13, instead of 18 as announced in the circulars first received. Accommodations at one of the best hotels at the rate of $1 a day (including early breakfast), can be secured by application to the chairman of the local committee, Dr. F. Stocker, of Lucerne, not later than September 1. Further information may be obtained from Dr. G. E. de Schweinitz, 1401 Locust Street, Philadelphia, the official correspondent for the United States.

DUBLIN LETTER.

The Consumptive Hospital.

The Royal National Hospital for Consumption for Ireland, which held its annual meeting a few days ago, is situated near Newcastle in County Wicklow, twenty-five miles from Dublin, in one of the most beautiful districts in Ireland. Founded eight years ago, it was the first "open-air" sanatorium in this country, and is still, with the exception of a small home near Belfast, the only one for poor patients. Of course, it is lamentably insufficient for the needs of Ireland, and this insufficiency tells injuriously on its own power of doing good. The hospital contains sixty-eight beds; 12,000 people die every year in Ireland from tubercular diseases. With the consequent enormous demand on its space the hospital has to fall back on the very doubtful expedient of limiting the stay of patients to a short period. The regulation time is fixed at ten weeks, though this is sometimes prolonged to sixteen or twenty in suitable cases. It is obvious that in such a short time as this little permanent good can be effected, for the treatment of tubercle has to be marked in months or years, not in weeks. At the same time the period is longer than is found possible in most hospitals for consumption in England, where six weeks is the usual period. Under the circumstances, sanatoria for the poor have but little power except in their educational capacity. They can teach patients the elementary facts of rational treatment, and the dangers of infection, and they can train them to follow hygienic modes of life. I fear, however, it is too often impossible, even for the most willing patients, to carry out their instructions fully on their return to domestic and business life. As it is, however, even in the short period allowed, Newcastle does excellent work. The annual report tells us that gain in weight is all but universal, and that at the time of their discharge many patients show no physical sign of disease. An interesting feature is the ward maintained by a manufacturing company for the use of their own employes, and patients in this ward are not affected by the usual limit of stay in the institution. The report of the company's medical officer, on the effects of the Newcastle treatment on his patients, is valuable testimony to the efficiency of the work that is done when there is no obnoxious time limit. Every one of the patients he had sent there had improved; several of them he believed cured; all had been, in his opinion, doomed to speedy death but for the treatment. The stay in hospital had varied from six to over twelve months. It is satisfactory that the hospital has enough funds to build a new wing, which will hold thirty beds for females. It is also intended to open an adjunct dispensary in Dublin where candidates for admission can be seen and former patients remain under treatment, and where advice—medical and educational—can be given to patients who are unsuitable for admission.

LONDON LETTER.

New Medical Buildings at Cambridge.

The new buildings erected in the University of Cambridge for the study of medicine, botany, geology and law, recently mentioned in THE JOURNAL, have been opened by the king, in the presence of a distinguished gathering, which included the presidents of the royal colleges of physicians and of surgeons, Sir W. Broadbent, Dr. Clifford Allbutt, regius professor of physic in the university, and Dr. Sims Woodhead, professor of pathology. As might be supposed, the accommodation for the study of medicine in this ancient university has fallen far behind modern requirements. The new buildings are thoroughly up to date and will be replete with every convenience. They are built of brick faced with Ancaster stone, and perfectly plain in style, without pretensions to architectural beauty, as is supposed to be fitting for a medical school. In the basement are workshops, storerooms, combustion and other experimental rooms, photographic rooms, engine house, electric lighting, heating and ventilation installations. On the ground floor are various private workrooms, large demonstration and examination rooms, the medical and surgical departments, and pharmacologic laboratories. There is a spacious entrance and staircase paved with black and white marble. At the foot of this staircase is a large lecture room capable of accommodating 200 students, while facing are the pathologic museum and two workrooms—one for pathology and the other, at present, for public health work. The lecture room receives practically no lighting from without, but is dependent on artificial light. This was done designedly so that all available light could be used for the workrooms. It was thought that in the lecture room artificial light would be better than natural light as the exact amount necessary for a demonstration could be focused on to map or screen and maintained there steadily. On the first floor is the Humphry Museum, so named after the late distinguished professor of surgery in the university. It is a finely proportioned room, 62 by 38 feet. The walls are lined with glazed tiles of a sea-green color, relieved with dull pink moldings. The cost of the museum was largely defrayed by subscriptions from Cambridge medical graduates, many of whom were pupils of the great Cambridge teacher. On the same floor is the library—a lofty room lighted from the top. An ingenious arrangement for stowing books in stacks has been adopted. Each separate block of cases is movable, allowing access to shelves behind, and a very large library to be housed in a moderate space. On this floor are also the private rooms of the regius professor of physic, a research room for members of his class, and an operating and a private room for the professor of surgery. On the second floor is a small museum for teaching purposes where the student will have access to all specimens and will be able to bring his text-books and note-books. Beyond this museum is a laboratory for pathologic chemistry, in connection with which is a photographic room. There are also a large practical class-room for morbid pathology lighted from the roof with accommodation for 90 students, and an incubating room. The greatest care has been taken in the details of equipment so as to provide the maximum of convenience for the worker. In the rooms for research and practical work hot and cold water, gas and electricity are laid on to every bench. The walls and ceilings are finished with a smooth concrete surface, all angles are rounded, and the walls join the ceilings and floors in curves, so that there are no corners for the collection of dirt. In his address the vice-chancellor of the university said that since the earliest times medicine had an honored place, and expressed the hope that it would now have a home worthy of its splendid progress in recent days. In replying the king said that he was confident

V 4
190

that at Cambridge the progress would be continued, and that the old universities must succeed to new endowments for education if the realm was to be kept up to its proper standard of efficiency. In the library Prof. Sims Woodhead showed the working of the sliding bookcase, which he had chosen after seeing similar ones used in the United States. Pathologic specimens were arranged for the inspection of the king, who took particular interest in specimens of *Trypanosoma nagana* placed under a microscope.

Medical Education in London.

The great interest of the king in medical science is again shown by his communication to the Faculty of Medicine of the University of London in relation to the proposed institute of the medical sciences. Medical education in London has always been carried on by the various schools as a private enterprise, and is regarded by the public as so profitable that an appeal for funds is regarded by many as an impertinence. The recently established Polyclinic, the first attempt to provide graduate teaching on a large and systematic scale in London and to remove from the metropolis of the world the stigma of being far behind comparatively small continental cities, though badly in want of funds, has failed to appeal to the imagination of the philanthropic, and only has been able to get out of difficulties by donations from the profession. While munificent gifts can always be obtained for the needs of the sick poor it is thought that medical education is a matter entirely for the profession and one to be settled on business lines. The king has set an excellent example in abolishing this thoughtless view. To remedy the defects arising from the want of concentration of the teaching of the earlier subjects of the medical curriculum it is proposed to found an institute of the medical sciences. Last year the senate of the University of London appointed a committee of appeal to raise funds. At first it was determined not to make the appeal more public than was implied in sending a copy of it to every member of the faculty of medicine, in the hope that some individual or individuals of ample means might furnish sufficient to build and equip, if not to endow, the institute. This expectation was not realized. Then an appeal was made to the public through the lay press. When the matter came under the notice of the king he at once gave his support and contributed $520. The result of this will be a tremendous impetus to the fund, for in this country the public estimates individuals and things, not so much by their merits, as by the support and recognition they receive from persons in high social positions. The appeal has been most favorably received by the lay and medical press, and has been recommended by the treasurers of nine of the hospitals, to which medical schools are attached. Promises of contributions amounting to $40,000 have been received.

The Prevention of Consumption.

The fifth annual meeting of the National Association for the Prevention of Consumption has just been held. A very active campaign has been carried on. After a visit to Germany of a deputation from the National Conference of Friendly Societies to inquire into the German system of providing sanatorium treatment for the working class a further conference took place between the council of the association and delegates from the "Hospital Saturday Fund." The latter is a fund collected for the hospitals in the streets and workshops once a year on a particular Saturday. At the conference it was decided to form a national committee for the establishhment of sanatoria for workers suffering from tuberculosis. They have in the first instance been requested to ascertain the requirements of consumptive workers, the accommodations existing, and to suggest and organize a scheme for the promotion of such sanatorium accommodation as may be necessary. The council have done their best in the past five years to promote the voluntary notification of phthisis to the health officers throughout the country. This practice has been extending, and in Sheffield, owing to the strong representation by the health officer and one of the medical advisers of the local government board a committee of the house of commons recently sanctioned a corporation by-law for that city in which notification of pulmonary tuberculosis is made compulsory on every physician called on to visit a case. The report also gladly calls attention to the recent by-law of the London County Council prohibiting spitting in public places and carriages. As to the isolation of consumptive cases in workhouses and asylums, steps have been taken by some few boards of guardians to deal with the question not only of isolation, but of treatment, and with good results. With regard to consumption in the asylums for the insane a committee of the Medico-Psychological Association of Great Britain and Ireland have recently made a very full report, and suggestions which have received the approval of the council, who hope that the commissioners in lunacy will see that they are carried out. Considerable progress in the erection of sanatoria has been made during the year: there are now some 70 institutions in the United Kingdom containing 2,760 beds. This is an increase of 18 institutions and 375 beds over the return in October, 1902. But the majority of these institutions are for paying patients, and the need of providing accommodation for the poor is still urgent. The most important movement in connection with sanatorium work during the past year was the laying of the foundation of the King Edward VII Sanatorium, in Surrey, November 3, which has previously been described in THE JOURNAL. There are 935 members of the central association and 2,900 of the 20 branches, making a total of 3,835. In addition to these there are colonial branches or kindred associations in Canada, Victoria, New South Wales, South Australia, Natal, and Cape Colony. The movement for providing sanatoria accommodation for postal employee suffering from tuberculosis is making good progress. These employes suffer from tuberculosis in the proportion of 6 per 1,000. A proposal is on foot to establish 100 beds, to be increased later.

The Study of Tropical Diseases in Liverpool.

At the annual meeting of the Liverpool Royal Southern Hospital it was reported that 149 patients were admitted into the tropical diseases ward, against 137 and 131 in the years, 1902, and 1901, respectively. The majority of the patients were suffering from malarial diseases, other diseases being dysentery, beri-beri, bilharzia disease, craw-craw, etc. Students attend from all parts of the world—America, Chili, Spain, Portugal, Germany, Austria, Finland, Sweden and Norway.

Correspondence.

Osteotherapy in New York.

NEW YORK, March 26, 1904.

To the Editor:—A bill has been introduced in the legislature of the state of New York by Senator Fitzgerald, entitled "An Act to Define and Regulate the Practice of Osteotherapy." It is Senate bill No. 983, introductory No. 761, and has been referred to the committee on judiciary, of which Hon. Edgar T. Brackett is chairman.

This bill defines "osteotherapy" as follows: "The practice of osteotherapy is defined to be a system, method or science of healing disease without the use of drugs or medicine of any kind. It is based on the proven laws of anatomy and physiology, and comprises scientific and thorough knowledge of the structure and functions of the human mechanism, to apply certain organic laws and natural remedial resources, within the human organism itself, and by means of scientific manipulations and adjustment, assist nature, in harmonious accord with its own mechanical principles, activities and processes, to recover from displacements, derangements, obstructions and pressures, and to regain normal equilibrium of form, action and function, thus restoring to the patient normal health and strength. The word 'osteotherapy' is derived from the Greek ('osteon,' bone, and 'therapeia,' nature, healing). The word 'osteotherapy' is a correction of the word 'osteopath,' which latter means, translated from the Greek ('osteon,' bone, and 'pathy,' suffering), bone suffering. The word 'osteotherapy' embraces the science so-called osteopathy, the practice of massage and Swedish movements to its fullest extent, and any one practicing the latter sciences, under those or different names, shall come under the jurisdiction of this act."

It is difficult to imagine this as a serious effort to secure legislative enactment, for to read the definition is "to laugh"; but we must assume that the gentleman who introduced the bill was not actuated by the desire to amuse his colleagues. The measure goes on to provide for a board of examiners, appointed by the Regents of the University of the State of New York, for examination and registration fees, and so on. If physicians will write to the members of the Senate judiciary committee opposing this bill, its fate will not be long in doubt.

If you will publish this letter together with the inclosed reasons why "osteopathy" and allied "pathies" should not receive special recognition, it will bring the matter before the

profession, and, I believe, aid those who are endeavoring to protect our professional standards. One of the arguments used at the public hearings before our legislature is that other states have enacted laws recognizing the practices of "osteopathy," "optometry," and other peculiar methods of treating disease. I can not believe that New York will ever enact similar laws unless some better reason than this is advanced. I do not believe that New York will enact any laws affecting the practice of the healing art unless the medical profession will indorse them. This opinion is the result of about eight years of more or less intimate acquaintance with our legislators, and, if it is correct, then, to use the language of the day, it is up to the medical profession to be alive to its responsibilities.

Very truly yours,

FRANK VAN FLEET, M.D.,
Chairman Committee on Legislation of the Medical Society of the State of New York.

[The following are the reasons referred to above.]

REASONS WHY OSTEOPATHY, OSTEOTHERAPY AND OTHER PECULIAR METHODS OF TREATING DISEASE SHOULD NOT RECEIVE SPECIAL PRIVILEGES.

1. There are no methods of counteracting the results of disease, or of remedying or correcting physical defects, known to science, which are not known and practiced by qualified and competent physicians when such methods have in themselves any valuable properties.

2. The practice of medicine, or, to use the more comprehensive term, the treatment of disease, has not reached that degree of perfection where it is possible to say with exactness that a certain remedy is a certain cure under all conditions. Circumstances modify conditions, and it is only after weighing all the conditions present in a given case, and often after consultation with experts in special lines, that the remedy can be selected and properly applied; and even then, under what may seem to be the most favorable conditions, the results are not always satisfactory. Therefore, the state, recognizing how imperfect and uncertain the knowledge of the healing art is, has created a standard of proficiency with which all who desire the right to practice this art must comply. Not that such practitioners may be able to treat certain diseases; not with the idea of creating classes of practitioners, but with the single idea that all who hold themselves out as competent to practice the healing art shall have sufficient knowledge to recognize and discriminate the various diseases and defects, and to be familiar with and able to apply the known remedies. The state places in the hands of practitioners of the healing art extraordinary discretionary power; after receiving this power from the state these practitioners are responsible to nobody but themselves for the conscientious discharge of their duties. It would be manifestly improper for the law-making powers to confer privileges such as these on any but the most competent in order to make them as little a menace to the community as possible.

3. Osteopaths, or osteotherapaths, claim that the method they employ is not the practice of medicine. The person, be he supreme court judge or an ordinary citizen, who claims that the practice of medicine necessarily implies the giving of medicine or drugs, must have a very limited knowledge of the work of physicians. There are many physicians who have received the privilege from the state to practice medicine without drugs who would deny that the best practitioners of medicine, who rarely resort to drugs in the treatment of the affections they have to deal with. Indeed, it is quite as much the function of the medical practitioner to give advice as it is to give medicine; to apply other forms of treatment, as bath, rubbings, massage and manipulations, as it is to apply drugs. There is an ever-growing tendency to give fewer and fewer drugs in the treatment of disease, but no educated physician would be willing to undertake the treatment of any form of disease if he was denied the privilege of giving drugs and medicines if they seemed to be indicated, or indeed to be restricted in his treatment of disease to the employment of any one method. Whether the treatment of disease is the practice of medicine or not, one thing is certain: osteopaths and osteotherapaths desire the privilege possessed by licensed physicians, that of treating disease. Not one disease, or any particular class or type of disease; they desire the right to undertake the treatment of all diseases, defects and infirmities indiscriminately, as physicians do, except that they are willing to be restricted to the employment of one method of treatment. This, as already stated, is in itself sufficient to condemn them as indicating the absence of knowledge of the scientific discoveries of the present time. No conscientious and educated physician would be willing to submit to a restriction of this kind.

4. The so-called theories of the so-called osteopaths or osteotherapaths, are positively dangerous. For example: They have recorded themselves at the hearings before the legislature of New York and other states as not believing in the contagiousness of certain diseases, as smallpox, scarlet fever, erysipelas, and so on. With this ignorance they would not realize the necessity for disinfection, and would go directly from attendance on a case of this kind to deliver a pregnant woman, and the result might be disastrous.

The denial of the value of antitoxins, of vaccination, and of the necessity for isolation and disinfection, together with the teaching of doctrines entirely at variance with accepted scientific facts, stamps these people as positively dangerous to the community. That they should ask the state to create a standard for them less rigid than that with which physicians generally have to comply, is evidence itself that their motive is neither honest nor honorable. If osteopaths, or osteotherapaths, really and honestly believed they were possessed of a knowledge, or had a method of treating diseases superior to the knowledge or methods of other physicians, they would not constantly endeavor to secure the legal right to employ their methods by compliance with a standard less than that already demanded by the state. The logical course to pursue would be to comply with the existing standard, and then demonstrate the superiority of their methods.

5. Osteopaths, or osteotherapaths, claim an extraordinary knowledge of anatomy and chemistry. If such a claim is a truthful one, it does not stamp the possessors of such knowledge as competent to practice the healing art. A knowledge of physiology and pathology is even more important and necessary. It will not do to say one does not believe in the accepted views of pathology and etiology unless one has a knowledge of them, and one can not have a knowledge of these branches unless one has devoted sufficient time to their study to acquire it. If four years of study are necessary to prepare and properly equip physicians, and osteopaths, or osteotherapaths, can secure the legal right to undertake the treatment of disease after only two years of preparation, some other class of practitioners will doubtless appear and urge, with equal reason and justice, that only one year of preparation is necessary to properly fit one to practice their method. It will not do for the state to discriminate; if any standard is necessary at all, it should be made to apply to all alike. Either this must be done, or, in justice to all practitioners of the healing art, all standards should be abolished, and the field thrown open to all comers. The latter course would be best for the doctors, but not so good for the community. The public generally can have but a limited knowledge of what is best in the way of remedies and methods in the treatment of disease. For its own protection the state creates medical laws, and, instead of lessening the requirements of these laws at the request of all sorts of fakirs who may come along, it would be better to make the requirements more rigid, and make the penalty for violation of the common law so severe and so easily enforced that quacks and charlatans of all kinds would keep clear of the state of New York.

Effect of Potassium Iodid on Urine.

PHILADELPHIA, March 22, 1904.

To the Editor:—The following case is reported as a clinical note, not because it presents new or unusual features, but because it brings into question the propriety of a very common method of administration of one of our most commonly used drugs, and also because the reaction obtained in a specimen of the urine may not be familiar to all of your readers. The urine referred to was from a young tuberculous subject, whose case was observed in the Methodist Hospital in Philadelphia. The resident physician, Dr. Richmond, noted that on boiling the urine and adding a small quantity of nitric acid the fluid first assumed a deep claret color, and later, on the further addition of acid, a purplish tint which colored the foam and the fumes a brilliant purple also. At first it was suspected that the reaction was one to which attention has been repeatedly called by different observers, of a pink coloration produced by the addition of nitric acid to the urine of certain tuberculous patients. It was found, however, that this patient was receiving thirty grains of potassium iodid three times daily, and further tests showed that the reaction was undoubtedly due to the presence of iodin salts in the urine. After the addition of starch the urine became a dark blue at once upon adding a drop of nitric acid. This reaction occurred when the starch powder was suspended in the foam as actively as when the urine itself was tested. On further heating the specimen, to which nitric acid only (and no starch) had been added, the purple color was soon discharged, and on still further heating and the addition of small quantities of the acid the color became first amber, then yellow, and finally retained but the faintest tinge of straw color. The reaction appears of practical interest as indicating the excretion of excessive amounts of the drug, and amounts probably in excess of those assimilable by the system, even though there were no symptoms of iodism present. The discharge of iodin or its salts in the foam and vapor also suggests the possibility that in the formation of KI solutions by the druggist according to the customary methods much less of the drug is retained in the solution than is supposed, and much less, therefore, is administered in the drop dosage than is intended.

ROBERT N. WILLSON, JR.

Hospital Experience Necessary for Licensure.

SOMERS, MONT., March 22, 1904.

To the Editor:—In the March 19 edition of THE JOURNAL, Dr. F. C. Bennett discusses the advisability of a compulsory interneship. He certainly makes some unwarranted statements. He says that none but sons of the wealthy can avail themselves of such a training. From my own personal experience, I know that a poor man can have a hospital training and I know many others beside myself who were poor, yet who

spent a year or eighteen months in a hospital. I have practiced for a year in the backwoods of Montana and never yet have I been able to see where my hospital training hindered me. In fact, I have many times been thankful I have had such training. I can not conceive of a case in which a student fresh from college would have the advantage over a hospital-trained man. F. B. BOGARDUS, M.D.

Queries and Minor Notes.

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish his name will be faithfully observed.

PATENT MEDICINES BARRED IN SWEDEN.

PITTSBURG, PA., March 23, 1904.

To the Editor:—I read the following in a local newspaper:

"Patent Medicines Barred in Sweden; Pink Pills and the Like Not Wanted. Only One Druggist to Every 15,000 Persons.

"WASHINGTON, March 22, 1904.

"Patent medicine men in the United States had best keep away from Sweden. This warning has been sent them by Minister Thomas, at Stockholm. Not a patent pill, bottle or preparation can now be obtained in the kingdom and the 350 apothecaries that control the medicine business of the entire country declare they will not handle any of that kind of trade. The importation of patent medicines, Minister Thomas says, would probably be followed by punishment of the offender and the confiscation of the medicines. In Sweden there is only one druggist to every 15,000 people, and the members of the profession consider themselves, Minister Thomas says, 'public officers and, in some sense, the guardians of the public health.'"

Blessed Sweden! What a boon such legislation would be to enlightened (?) America. Who among us has not felt the harassing effects of reckless, unscrupulous, almost criminal and certainly illegal dispensing and practicing by druggists? And worse still, in how many scores of cases have we seen the unhappy results of such practicing on our patients? Bad enough to thrust these countless hundreds of "patent medicines" (patent poisons many) on an ignorant and gullible public and flaunt their advertisements in our faces at every turn. But to have our druggists, who *should* be "guardians of the public health," urge the suffering patient to use his wares, knowing that many of them are either worthless or injurious, and often even dissuading him from consulting a physician, is indeed a disgrace to our beloved country. Is there no remedy? J. M.

ACID DUODENAL MEDICATION.

ATLANTA, GA., March 22, 1904.

To the Editor:—I read on page 804 of THE JOURNAL, March 19, an abstract on "Acid Duodenal Medication." I have some patients who need just this treatment. I can not get the tartaric acid in gluten-coated capsules here. Can you tell me where these can be obtained and how much Dr. Enriques gives the patient? I am very much interested in this treatment and will thank you very much for all the information you may give me on this line.

J. E. ASHCRAFT.

ANSWER.—We are unable to learn of any drug firm that makes such a pill, but any of them will make the pills to order. Perhaps your druggist can do it. Dr. Ed. Enriques states that he obtained satisfactory results from the simple ingestion of a 3 per cent. hydrochloric acid "lemonade," sipped every fifteen minutes at the time when the duodenal medication may be assumed to be most needed, approximately three to four hours after meals. This proved particularly effective in the cases that may be called neuromotor dyspepsia. It was in attempting to improve on this method that he hit on the idea of the more localized acid duodenal treatment by the gluten-coated capsules of tartaric acid. They were made for him by Dr. Carrion, chief of the laboratory at the Saint-Antoine Hospital, Paris. Dr. Enriques does not seem to think that the tartaric acid has any special advantages; he merely happened to select that acid. In his published communication on the subject there is no mention of the dosage.

SALE OF PRACTICE.

CEDAR SPRINGS, MICH., March 22, 1904.

To the Editor:—I made a verbal agreement to buy another physician out, buying his good will, drugs, furniture in office, office building and house and lot. I paid him $200 to apply on account and took his receipt. He took me into his office and introduced me to his patients for nearly three months. When the time for settlement came his wife refused to sign the deed, having changed her mind in regard to moving. Now I am suing him to fulfill contract. I am told that THE JOURNAL contained a decision bearing on almost a similar case. I take THE JOURNAL, but did not happen to see it. Can you give me any information on the subject?

CHAS. W. BRAYMAN, M.D.

ANSWER.—Consult THE JOURNAL, Sept. 19, 1903, page 735; Nov. 28, 1903, page 1364; Jan. 9, 1904, page 122.

TO REMOVE FRECKLES.

CALDWELL, KAN., March 23, 1904.

To the Editor:—Please give me a prescription for removing freckles, either by drugs or mechanical. D. E. K.

ANSWER.—Stevens recommends the following, applied twice daily:

℞ Hydrarg. chlor. corros.....gr. iv to viii
Alcoholis et aquæ, of each q. s. ad.....℥iv

Bartholow suggests:

℞ Potassii carbonat.....℈iii
Sodii chloridi.....℈ii
Aquæ rosæ.....℥viii
Aquæ aurantii flor.....℥ii

M. Sig. Use as a lotion.

Remember that freckles usually return after removal.

LATENT GONORRHEA OR SIMPLE URETHRITIS.

MACON, GA., March 20, 1904.

To the Editor:—Can a genuine gonorrhea be present when all the symptoms are present and are very marked, but when a careful microscopic examination shows no gonococci, but an abundance of staphylococci? G. W. ROBERSON, M.D.

ANSWER.—Yes. It may be hidden and the gonococci may appear under excitement or after drinking intoxicants. On the other hand, this may be a non-specific urethritis. What the physician should advise in such a case is one of the most delicate problems that comes to him.

PROMPT SETTLEMENT OF PHYSICIANS' BILLS.

We have been shown a receipted bill from a physician in the southwest on which the following is printed: "A PROMPT SETTLEMENT of this bill is requested and expected. If bills are paid monthly a discount of 10 per cent. is given. Bills not paid promptly will be passed to my attorney for collection, unless by special agreement. If you pay your physician promptly he will attend you promptly, night or day, rain or shine, while your slow-going neighbor suffers and waits, as he made the doctor wait; and while he is waiting the Angels gather him in."

WISCONSIN BOARD.

DR. N. A. R.: The secretary of the Wisconsin State Board of Registration in Medicine is Dr. Filip A. Forsbeck, Milwaukee.

Marriages.

G. E. MILTON SMITH, M.D., to Mrs. Margareta M. Smith, at Baltimore, March 23.

G. WISHART SLATER, M.D., to Mrs. M. L. Rabold, both of Baltimore, March 16.

MARCUS FEINGOLD, M.D., to Miss Birdie Lowenberg, both of New Orleans, March 23.

ROBERT J. RIVERS, M.D., Paducah, Ky., to Miss Janet Bush of Smithland, Ky., March 22.

JOHN STEWART KULP, M.D., U. S. Army, to Miss Zoe Worthington-Smith, at Philadelphia, March 23.

Deaths.

Elisha Peckham Clarke, M.D. Medical School of Maine, at Bowdoin College, Brunswick, 1863, fellow of the Rhode Island Medical Society, and its president in 1895 and 1896; president of the South County Medical Society in 1878; state senator in 1878, 1879 and 1880; medical examiner for the town of Hopkinton; surgeon in the Thirty-first Massachusetts Volunteer Infantry in the Civil War, died at his home in Hope Valley, R. I., March 17, after an illness of several weeks, aged 70.

Aaron Rysing Gleason, M.D. University of Georgetown, Washington, D. C., 1864, hospital steward and assistant surgeon during the Civil War, a member of the American Medical Association, member of the New Hampshire legislature in 1897;

fellow of the New Hampshire Medical Society, and a member of the Cheshire County Medical Society, died at his home in Keene, N. H., March 4, from pneumonia, after an illness of three days, aged 68.

Abraham H. Hunt, M.D. Long Island College Hospital, Brooklyn, 1862, a member of the American Medical Association; surgeon during the Civil War, and for many years prominent as a surgeon in Wooster, Ohio, died at his home in that city, March 16, from heart disease, after a prolonged illness.

Henry C. Gemmill, M.D. Rush Medical College, Chicago, 1868, a member of the American Medical Association, Huntington County Medical Society, and Indiana State Medical Society, died at his home in Markle, Ind., March 18, after an illness of several months, from chronic nephritis.

Farquhard Campbell, M.D. University of Michigan, Ann Arbor, 1883, for eight years superintendent of the Osawatomie State Hospital, was stricken with apoplexy at his office in Kansas City, Kan., March 17, and died at Bethany Hospital four hours later, aged 47.

John Chester Lyman, M.D. Harvard University Medical School, Boston, 1872, who retired from practice nearly 20 years ago, died at the German-American Hospital, Chicago, from valvular heart disease, after an illness of about six months, March 29, aged 53.

Amos Seip, M.D. University of Pennsylvania, Philadelphia, 1848, one of the founders of the Northampton County Medical Society, in which he had filled practically every office, died from paralysis at his home in Easton, Pa., March 21, aged 81.

Fred A. Fanyo, M.D. University of Illinois, Chicago, 1903, of Watseka, Ill., an interne at Cook County Hospital, Chicago, assistant to the chair of clinical diagnosis in his alma mater, died at the hospital, March 22, from pneumonia, aged 26.

Derrick P. January, M.D. Tulane University, New Orleans, 1860, a surgeon in the Confederate service during the Civil War, died at his home in Crowley, La., March 17, from cerebral hemorrhage, after an illness of a few hours, aged 65.

Frank H. McElroy, M.D. Tufts College Medical School, Boston, 1903, assistant pathologist to the Rhode Island Hospital, a bacteriologist of promise, died at his home in Providence, R. I., March 18, after a brief illness, aged 26.

Josias S. Duff, M.D. Columbus (Ohio) Medical College, 1881; Bellevue Hospital Medical College, New York, 1888, died recently at his home in Allegheny, Pa., from carbolic acid, accidentally taken, aged 49.

Thomas R. McInnes, M.D. Toronto (Ont.) University Medical Faculty, 1869, formerly senator and lieutenant governor of British Columbia, died recently from heart disease at his home in Victoria, B. C.

Myron Northrup, M.D. Geneva (N. Y.) Medical College, 1859, for 33 years a resident, and in 1886 mayor of Port Huron, Mich., died at his home in that city, March 15, aged 67.

Alanson P. Burch, M.D. Wooster University, Cleveland, 1888, of Toledo, died from paralysis at the Toledo Infirmary, March 21, after an invalidism of four years, aged 67.

Edward N. Gerard, M.D. Medical Department of the University of Iowa, Keokuk, 1861, died at his home in Mesa, Ariz., March 18, after a long illness, aged 67.

Adolph O. Heiberg, M.D. Jefferson Medical College, Philadelphia, 1893, of Rushford, Minn., died at Northfield, Minn., March 18.

J. G. Cannon, M.D. Physio-Eclectic Medical College, Cincinnati, 1876, died at his home in Yuba City, Cal., March 17, aged 78.

Augustus J. Fuchs, M.D. Jefferson Medical College, Philadelphia, 1876, died at his home in Mascoutah, Ill., March 14, aged 56.

William Mosby Mercer, M.D., a surgeon in the Confederate service during the Civil War, died in Baltimore, March 24, aged 76.

William Goodall, M.D. Illinois, 1878, died at his home in Chicago, recently, from disease of the stomach, aged about 60.

Gabriel Henry Chabot, M.D. University of Maryland, Baltimore, 1883, died at his home in Baltimore, March 23, aged 43.

Frank I. Phillips, M.D. Detroit Medical College, 1882, died at his home in Escanaba, Mich., March 22, after a long illness.

Benjamin F. Taylor, M.D. Missouri Medical College, St. Louis, 1843, died at his home in New Orleans, March 18, aged 79.

Michael Mason, M.D. Tennessee, 1864; Michigan, 1890, died at his home in Muskegon Heights, Mich., March 23.

Joseph S. Tweddle, M.D. University of the Victoria College, Cobourg, Ont., 1889, died suddenly at his home in Sturgeon Bay, Wis., after an illness of several months.

Book Notices.

DISEASES OF THE EYE. By L. Webster Fox, A.M., M.D., Professor of Ophthalmology in the Medico-Chirurgical College of Philadelphia. With Five Colored Plates and 296 Illustrations in the Text. Cloth. Pp. 584. Price, $4.00. New York and London: D. Appleton & Co. 1904.

This book is dedicated to the memory of Ludwig Mauthner of the University of Vienna, the author's teacher, who he describes as the greatest operator of his day. The author declares that the treatise is the outgrowth of a series of lectures delivered during the last ten years at the Medico-Chirurgical College and Hospital. The book is, therefore, of a practical character, is divested of hazy theories, and is written in a plain and masterful manner. Of course, a great deal of the book is necessarily a rehash of other books, but Dr. Fox has brought each subject thoroughly up to date. It is a valuable addition to ophthalmologic literature, and will be of especial value to the student and general practitioner, who desire to keep well posted in this special avenue of labor. Considerable space is justly given to the therapeutics of the *x*-ray, which, considering the growing interest in this subject, will be appreciated by the reader. The book is well and comprehensively indexed, and also possesses a most intelligible glossary of all necessary ophthalmologic names and expressions. There are many good and new illustrations, and some old and bad ones. It seems strange that in a new text-book, with all modern facilities for photography, drawings and colored impressions, that it is still necessary to give place to such time-honored illustrations as may be found scattered through this as well as through all other modern works on ophthalmology. Still it can be truthfully said of the book under review that there are fewer ancient pictures within its covers than are to be found in any other ophthalmologic text-book with which we are familiar. Miss Washington's colored drawings are, as usual, the best of their kind. The author's large and varied experience, combined with a natural surgical intuition and enthusiasm, and with a decided ability to write and describe what he has to say, in clear, distinct, comprehensive language, serves to render this text-book one of real value to all students, ophthalmologists and general practitioners.

PORTFOLIO OF DERMOCHROMES. By Professor Jacobi of Freiburg im Breisgau. English Adaptation of Text by J. J. Pringle, M.B., F.R.C.P., Physician to the Department for Diseases of the Skin at the Middlesex Hospital, London. Volume II. Leather and Cloth. Pp. 181. Price per set, $15.00. New York: Rebman Company. 1903.

The diagnosis of skin diseases, even by the specialist, is often a difficulty, and the general practitioner frequently meets cases that are more than puzzling. To describe in words the characteristics of most of the skin infections is an impossibility, and for this reason all works on this subject, if not accompanied with illustrations, are deficient. And even then, simply black and white pictures are usually unsatisfactory. The recent development of three and four color printing has made it possible to show practically true to nature every kind of eruption. The second volume of Jacobi's atlas of skin diseases has, like the first, illustrations of this character; they show the disease exactly as it appears to the eye. The work, as a whole, is intended for the general practitioner, and consequently includes the commoner forms of skin diseases, and not the unique and rare. The exanthemata—such as scarlatina, measles, smallpox, etc.—are all covered. While the value of the work rests principally in its illustrations, yet the accompanying text will be found satisfactory. It is clear and to the point, and, while not voluminous, it contains sufficient details and descriptive matter relative to clinical features, prognosis and treatment to make the work reasonably complete in itself, and one that can be commended to those who desire an atlas in skin diseases. It is to be regretted that an index is not included; a book of this character should be one of ready reference, but this is impossible without a good index.

HEGELE'S PHYSICIANS' ACCOUNT RECORD. A Card Index Record for Keeping Physicians' Accounts, Appointments, Records and Memoranda: Consisting of a Daily Record Card for Each Day in the Year, and a Yearly Account Card for Each Family or Patient, Contained in a Specially Constructed Wood Tray with Monthly, Daily, Alphabetical and Open and Closed Account Guide Cards. Together with an Imported Real Leather Prescription Book and Card Holder. Complete $10. Trial Offer $5. Chicago: Box A 1055, Hegele's Physicians' Account Record.

This is not a book, but it takes the place of the books which most physicians use for the purpose. Card index records are taking the place of ledgers, journals and blank books throughout the business world to a marked degree because of their superiority. This card index record is asserted to be an entirely new and modern method for keeping physicians' accounts, records, appointments and memoranda, and if we accept the warm recommendations of some of the prominent physicians and surgeons who have used it, it will be a valuable addition to any practitioner's equipment. A description is of little value without the cards to illustrate it, so we will merely say that this record seems very simple, accessible and practical and so compact, complete, easily kept and accurate that it is said to entirely overcome all difficulties of that bane of existence, "bookkeeping," and to stand the test of the courts. There is very little writing to be done, as the record itself is gotten up in so complete a manner that it does away with the usual amount of writing necessary with the old methods of keeping books and use of signs.

ESSENTIAL OF PELVIC DIAGNOSIS WITH ILLUSTRATIVE CASES. By E. Stanmore Bishop, F.R.C.S. Eng., Hon. Surg. Ancoats Hospital, Manchester. And an Appendix on Examination of Blood, etc. By Chas. H. Melland, M.D., (Lond.) M.R.C.P., Hon. Physician Ancoats Hospital, Manchester. Cloth. Pp. 297. Price, $3.00 net. New York: William Wood & Co. 1903.

This volume, which does not pretend to supplant the regular works on gynecology, is simply a statement of the principal diagnostic points that are to be observed from the viewpoint of the practitioner, who sees the symptoms without necessarily a previous knowledge of the disease. The inductive rather than the deductive method, is followed, and the plan appears a good one, though it is not new. The book is divided into five parts: 1, Pelvic diagnosis, giving the methods; 2, lines of diagnosis, describing the symptoms; 3, diagnostic tables, in which the symptoms are grouped and tabulated according to the conditions which they should indicate; 4, illustrative cases to demonstrate the manner in which the foregoing data should be employed; 5, a useful though brief description of the blood examinations and methods. The work has an excellent index, in which each subject has given in parallel columns the pages on which it is treated in the various subdivisions of the work—a plan which we have not heretofore seen adopted.

A TEXT-BOOK OF LEGAL MEDICINE AND TOXICOLOGY. Edited by Frederick Peterson, M.D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and Walter S. Haines, M.D., Professor of Chemistry, Pharmacy and Toxicology, Rush Medical College, in Affiliation with the University of Chicago. In Two Volumes. Fully Illustrated. Cloth. Vol. II. Pp. 750. Price, $5.00. Philadelphia, New York, London: W. B. Saunders & Co. 1903.

The first volume of Peterson and Haines' work on medicolegal medicine has already been noticed. This second volume keeps up the character of the first. The editors have been able to obtain a very competent corps of collaborators on the various subjects included. In the first section of the work the subjects of malingering, questions of pregnancy and venereal diseases, birth, legitimacy, etc., marriage, divorce, malpractice, laws relating to insanity and the medicolegal relations of the *x*-rays are all treated of. The second portion is devoted to toxicology, as well as the medicolegal examination of the blood, seminal stains, etc. The book is fully illustrated, ample in its elaborate references and will undoubtedly be long a standard work of reference on this subject.

BLOOD-PRESSURE IN SURGERY, An Experimental and Clinical Research. The Cartwright Prize Essay for 1903. By George W. Crile, A.M., M.D., Professor of Clinical Surgery, Western Reserve Medical College. Cloth. Pp. 422. Price, $4.00. Philadelphia and London: J. B. Lippincott Co. 1903.

This volume contains the account of Crile's experiments on blood pressure and shock, and the details fill the greater portion of its pages. The practical importance of his results is evident, especially as regards operative surgery. As he says in the final summary: "In many instances the control of the blood pressure is the control of life itself," and he demonstrates that by proper methods of controlling it we may almost resuscitate the dead. The facts that a decapitated dog was kept alive as regards its vegetative functions for many hours, and the partial resuscitation of a man who had died from fatal injury of the brain, are indications of the possibilities of the method here described. The fact that the memoir has received the Cartwright prize, is sufficient evidence of its merit. The author is careful to state that all his experiments were conducted under full anesthesia, thus forestalling the criticisms of the antivivisectionists.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia, with the Collaboration of Wm. Osler, M.D., Baltimore; John H. Musser, M.D., Philadelphia; Jas. Stewart, M.D., Montreal; J. B. Murphy, M.D., Chicago; A. McPhedran, M.D., Toronto; Thos. M. Rotch, M.D., Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburgh; John Harold, M.D., London; Edmund Landolt, M.D., Paris, and Richard Kretz, M.D., Vienna. With Regular Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Vol. IV. Thirteenth Series, 1904. Cloth. Pp. 321. Price, $2.00 net. Philadelphia: J. B. Lippincott Co. 1904.

This serial appears with its usual excellent collection of contents covering special subjects in the departments of general treatment, medicine, surgery, gynecology, neurology, orthopedics, ophthalmology and pathology. The list of authors includes not merely American, but also prominent European authorities, such as Julien, Dyce Duckworth and others. It is unnecessary to say anything further to commend the work. The series can be profitably read by the average practitioner.

A SHORT PRACTICE OF GYNECOLOGY. By Henry Jellett, B.A., M.D., B.Ch., B.A.O. (Dublin University), F.R.C.P.I., L.M.; Assistant Master, Rotunda Hospital. Second Edition, Revised and Enlarged. With 223 Illustrations. Cloth. Pp. 406. Price, $2.75. London: J. & A. Churchill. Philadelphia: P. Blakiston's Son & Co. 1903.

This is the second edition of an English work, which is a very fair example of the briefer treatises on this important subject. We can not call it an exhaustive one nor recommend it in place of the fuller works. While its handling of the subject is generally judicious, and the illustrations and descriptions are clear, it does not meet the requirements either of the specialist or of the general practitioner.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfurt a. M. Authorized American Edition Translated under the Direction of Boardman Reed, M.D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College. Part IV. The Acid Autointoxications. By Prof. Dr. Carl von Noorden and Dr. Mohr. Cloth. Pp. 80. Price 50 cents. New York: E. B. Treat & Co. 1903.

Dr. Boardman Reed has done a service to American readers in having von Noorden's studies translated into English. In this little volume the acid intoxications are taken up and treated as the author's reputation might lead us to expect. The translation is well done.

THE GAZETTE POCKET SPELLER AND DEFINER. English and Medical. Second Edition. Flexible Leather. Pp. 216. Price 50 cents. New York: The Gazette Publishing Co.

This little dictionary, which the compiler says is intended primarily as a speller, is very handy and will doubtless be received with favor by the general, and especially the medical, public. Nearly half of the work is a medical dictionary and while, of course, it is not so full as others, it contains the larger portion of the medical terms which are sought for by the reader for information as regards definitions and spelling. The type is good, it seems to be free from errors and is a very convenient rest-pocket reference book.

THE PRACTICE OF MEDICINE. A Text-Book for Practitioners and Students, with Special Reference to Diagnosis and Treatment. By James Tyson, M.D., Professor of Medicine in the University of Pennsylvania. Third Edition, Thoroughly Revised and in Parts Rewritten. With 154 Illustrations, Including Colored Plates. Cloth. Pp. 1,240. Price, $5.50. Philadelphia: P. Blakiston's Son & Co. 1903.

The third edition of Tyson's Practice has been revised in certain points and the author has sought to make its con-

tents represent the more important ideas in medicine. The enlargement has been mainly in the treatment of infectious diseases and he has had the chapter on nervous diseases carefully revised by so competent a neurologist as William G. Spiller, which guarantees its accuracy and fullness to date. Another subject which has also had revision is that of dysentery, it being carefully revised by Dr. Simon Flexner, one of the first authorities on the subject. In its present form the book is one that can be safely recommended.

Miscellany.

THE HEYBURN PURE FOOD AND DRUG BILL.

Text of the Bill in Full, with Comments by the Author of this Important Measure.

Four weeks ago we gave an abstract of this bill, but it is of such great importance to the public and to the profession that we give it in full. It is known as H. R. 6295, Calender No. 1165. The following is the bill:

AN ACT.

For preventing the adulteration or misbranding of foods or drugs, and for regulating traffic therein, and for other purposes:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the introduction into any State or Territory, the District of Columbia, or insular possession from any other State or Territory, the District of Columbia, or insular possession, or from any foreign country, or shipment to any foreign country of any article of food or drugs which is adulterated or misbranded within the meaning of this Act is hereby prohibited; and any person who shall ship or deliver for shipment from any State or Territory, the District of Columbia, or insular possession to any other State or Territory, the District of Columbia, or insular possession, or to a foreign country, or who shall receive in any State or Territory, the District of Columbia, or insular possession from any other State or Territory, the District of Columbia, or insular possession, or foreign country, or who, having received, shall deliver in original unbroken packages for pay or otherwise, or offer to deliver to any other person any such article so adulterated or misbranded within the meaning of this Act, or any person who shall sell or offer for sale in the District of Columbia, the Territories, or insular possessions of the United States such adulterated or misbranded foods or drugs, or who shall export or offer to export the same to any foreign country, shall be guilty of a misdemeanor, and for such offense be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or be imprisoned not exceeding one year, or both, in the discretion of the court.

SEC. 2. That the Chief of the Bureau of Chemistry in the Department of Agriculture shall make or cause to be made, under rules and regulations to be prescribed by the Secretary of Agriculture, examinations of specimens of foods and drugs offered for sale in original unbroken packages in the District of Columbia, in any Territory or insular possession, or in any State other than that in which they shall have been respectively manufactured or produced, or from any foreign country, or intended for shipment to any foreign country, which may be collected from time to time in various parts of the country. If it shall appear from any such examination that any of the provisions of this Act have been violated, the Secretary of Agriculture shall cause notice to be given to the parties concerned with opportunity to be heard under such rules and regulations as may be prescribed by the Secretary of Agriculture, and if after such hearing it is found that any of the provisions of this Act have been violated, then the Secretary of Agriculture shall at once certify the facts to the proper United States district attorney, with a copy of the results of the analyses, or examination, duly authenticated by the analyst, or officer making such examination under oath.

SEC. 3. That it shall be the duty of every district attorney to whom the Secretary of Agriculture shall report any violation of this Act, or to whom any person, acting either on his own behalf or as the officer or agent of any State or Territory, the District of Columbia, or insular possession, shall present satisfactory evidence of any such violation, to cause proceedings to be commenced and prosecuted without delay for the fines and penalties in such case provided.

DEFINITIONS.

SEC. 4. That the term "drug," as used in this Act, shall include all medicines and preparations recognized in the United States Pharmacopœia for internal and external use; also any substance intended to be used for the cure, mitigation, or prevention of disease. The term "food," as used herein, shall include all articles used for food, drink, confectionery, or condiment by man or domestic animals, whether simple, mixed, or compound.

ADULTERATIONS AND MISBRANDING.

SEC. 5. That for the purposes of this Act an article shall be deemed to be adulterated—

In case of drugs:

First. If, when a drug is sold under or by a name recognized in the United States Pharmacopœia, it differs from the standard of strength, quality, or purity as determined by the test laid down in the United States Pharmacopœia official at the time of the investigation: Provided, That no drug shall be deemed to be adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon the bottle, box, or other container thereof, although such standard may differ from that determined by the test laid down in the United States Pharmacopœia.

Second. If its strength or purity fall below the professed standard under which it is sold.

That such drug shall be deemed to be misbranded:

First. If it be an imitation of or offered for sale under the name of another article.

Second. If the package containing it or its label shall bear any statement regarding the ingredients or the substances contained therein, which statement shall be false or misleading in any particular, or if the same is falsely branded as to the State or Territory or place in which it is manufactured or produced.

In the case of confectionery an article shall be deemed to be adulterated:

If it contain terra alba, barytes, talc, chrome yellow, or other mineral substances or poisonous colors or flavors, or other ingredients deleterious or detrimental to health.

In the case of food an article shall be deemed to be adulterated:

First. If any substance or substances has or have been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength.

Second. If any substance or substances has or have been substituted wholly or in part for the article.

Third. If any valuable constituent of the article has been wholly or in part abstracted.

Fourth. If it contain any added poisonous or other ingredient which may render such article injurious to the health of the person consuming it: Provided, That goods intended for export shall not be deemed misbranded or adulterated when prepared and packed in accordance with specifications of the foreign purchaser, provided no substance is used that is in conflict with the laws of the country to which the goods are to be shipped, when such country, having laws upon the subject, does not prohibit such process.

Fifth. If it consists in whole or in part of a filthy, decomposed, or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured, or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter.

An article of food shall be deemed to be misbranded:

First. If it be offered for sale under the distinctive name of another article: Provided, That the term "distinctive name" shall not be construed as applying to any article sold or offered for sale under a name that has come into general use to indicate the class or kind of the article if the name be accompanied on the same label or brand with a statement of the place where said article has been manufactured or produced.

Second. If it be mixed, colored, powdered, or stained in a manner whereby damage or inferiority is concealed, so that such product, when sold or offered for sale, shall deceive or tend to deceive the purchaser.

Third. If it be labeled or branded with intent so as to deceive or mislead the purchaser, or purport to be a foreign product when not so, or is an imitation, either in package or label, of another substance of a previously established name, or which has been trade-marked or patented.

Fourth. If the package containing it or its label shall bear any statement, design or device regarding the ingredients or the substances contained therein, which statement, design, or device shall be false or misleading in any particular, or if the same is falsely branded as to the State, Territory, or place in which it is manufactured or produced:

Provided, however, That an article of food which does not contain any added poisonous or deleterious ingredients shall not be deemed to be adulterated or misbranded in the following cases:

First. In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food, under their own distinctive names, and not included in definition first of misbranded articles of food in this section.

Second. In the case of articles labeled, branded, or tagged so as to plainly indicate that they are mixtures, compounds, combinations, imitations: Provided, That every such article shall be labeled, branded, or tagged so as to show the character and constituents thereof. And provided further, That nothing in this Act shall be construed as requiring or compelling proprietors or manufacturers of proprietary foods which contain no unwholesome added ingredients to disclose their trade formulas, except in so far as the provisions of this Act may require to secure freedom from adulteration or imitation: Provided further, That no dealer shall be convicted under the provisions of this Act when he can establish a guaranty signed by the wholesaler, jobber, manufacturer, or other party from whom he purchases such articles, to the effect that the same is not adulterated or misbranded within the meaning of this Act, designating it: And provided further, That said guarantor or guarantors reside in the United States. Said guaranty, to afford protection, shall contain the name and address of the party or parties making the sale of such article to such dealer, and said party or parties shall be amenable to the prosecutions, fines, and other penalties which would attach, in due course, to the dealer under the provisions of this Act.

SEC. 6. That every person, company, or corporation who manufactures or produces and delivers for interstate or foreign shipment or transportation, or who receives from any State, Territory, or the District of Columbia, or insular possession or foreign country, other than the State, Territory, District of Columbia, or insular possession in which it is received, and any person, company, or corporation who sells or exposes for sale in any Territory, or the District of Columbia, or insular possession, any article of food or drug shall furnish, within business hours and upon tender and full payment of the selling price, a sample of such drug or article of food to any person duly authorized by the Secretary of Agriculture to receive the same, and in any Territory, or the District of Columbia, or insular possession, to any officer or agent of such Territory or District, respectively, charged with the inspection of food or drugs in such jurisdiction, and who shall apply to such manufacturer, producer, or person, company, or corporation selling or exposing for sale as aforesaid such drug or article of food for such sample in sufficient quantity for an analysis of any such article or articles in his possession.

SEC. 7. That any manufacturer, producer, or dealer who refuses to comply, upon demand, with the requirements of section

six of this Act shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred dollars or imprisonment not exceeding one hundred days, or both. And any person found guilty of manufacturing or offering for sale, or selling, any adulterated, impure, or misbranded article of food or drug in violation of the provisions of this Act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles which said person may have been found guilty of manufacturing, selling, or offering for sale.

SEC. 8. That any article of food or drug that is adulterated or misbranded within the meaning of this Act, and is being transported from one State to another for sale, or having been transported, remains unloaded, unsold, or in original unbroken packages, or if it be sold or offered for sale in the District of Columbia and the Territories of the United States, or if it be imported from a foreign country for sale, or if intended for export to a foreign country, shall be liable to be proceeded against in any district court of the United States within the district where the same is found and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being adulterated or misbranded within the meaning of this Act the same shall be disposed of by destruction or sale, as the said court may direct, and the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the Treasury of the United States, but such goods shall not be sold in any State contrary to the laws of that State: Provided, however, That upon the payment of the costs of such libel proceedings and the execution and delivery of a good and sufficient bond to the effect that such articles shall not be sold or otherwise disposed of contrary to the provisions of this Act, or the laws of any State, Territory, or laws enacted for the District of Columbia, the court may order direct that such articles be delivered to the owner thereof. The proceedings of such libel cases shall conform, as near as may be, to proceedings in admiralty, except that either party may demand trial by jury of any issue of fact joined in such case and all such proceedings shall be at the suit of and in the name of the United States.

SEC. 9. That this Act shall not be construed to interfere with commerce wholly internal in any State, nor with the exercise of their police powers by the several States: Provided further, That nothing in this Act shall be construed to interfere with legislation now in force, enacted either by Congress for the District of Columbia or by the Territorial legislatures for the Territories, regulating commerce in adulterated foods and drugs within the District of Columbia and the several Territories, except wherein such legislation conflicts with the provisions herein.

SEC. 10. That the provisions of this Act shall not apply to common carriers or employees of common carriers.

SEC. 11. That this Act shall take effect and be in force from and after the first day of January, nineteen hundred and five.

Passed the House of Representatives January 19, 1904.

Bearing on the above we quote from two letters written by Senator Heyburn to Dr. Reed, chairman of the Committee on Medical Legislation of the American Medical Association.

UNITED STATES SENATE, COMMITTEE ON MANUFACTURES.
March 16, 1904.

. . . . I presume that you are familiar with both the House and Senate bills, known as the Hepburn bill and the McCumber bill, respectively. In our judgment, the Senate bill covers the question fully, and we hope to secure its passage at an early date. It has been fought by the patent-medicine trade, and also by the blenders of whisky, as well as by a number of other concerns desiring to avoid the exposition of their methods, which the bill would injure if enacted into law.

Letters from physicians commending and urging the passage of the bill will be of material assistance. The patent-medicine contingent and others opposed to the bill are inundating the members of the Senate and House with letters, which can only be well counteracted by expressions of opinion from physicians. In my judgment, the physicians next to the patients are most interested in the purity of medicines and foods.

(Signed) W. B. HEYBURN.

MARCH 18, 1904.

I have received many letters from physicians urging the passage of the Pure Food bill now pending before the United States Senate and reported by the committee of which I am chairman, but they all designate it by its House number—6295. The Senate committee have made some changes in the House bill, which, we think, are for the benefit of the measure. These changes which are found embodied in the Senate bill, which was reported as a substitute for the House bill, a copy of which I hand you herewith. You will notice that the bill still bears the House number, but not the text of the House bill. The Senate bill drops out Sections 1 and 7 of the House bill, and avoids the creation of a new and expensive department. It also leaves out the provision of the House bill under which the Secretary of Agriculture should establish standards, and in lieu thereof makes the American Pharmacopœia the standard of purity, etc., as to everything within its scope, and provides in addition thereto, "also any substance to be used for the cure, mitigation or prevention of disease."

The committee is advised that the American Pharmacopœia has not been revised for about twelve years, and that it is at most only published every ten years. It is, therefore, apparent that the vast number of medicines, patented or otherwise, which come into existence and use between the periods of publication of the Pharmacopœia, should be included within the scope of the protection intended by the bill. The attention of the committee was called to many of these patent medicines and other "extemporaneous," and it was deemed by the Senate committee necessary to have some general principle that would include the determination of the articles not included within the Pharmacopœia, by such rules as the courts may establish, and the courts will undoubtedly follow as nearly as possible such standards as the Pharmacopœia will adopt, if they adopt any for this class of medicines. You are undoubtedly advised of the fact that between the last two publications of the Pharmacopœia some thousands of articles came into use, which are not included in the last publication, and were not included in the previous one, and it is fair to assume that the increase has been quite as marked since the last publication, and to stop where the retail drug men have asked us to stop, with the American Pharmacopœia, would leave the door wide open to the deleterious medicines and nostrums that have come into use since its adoption.

I write you this fully in order that you may give me the benefit of your suggestions as to the provisions in the Senate bill not contained in the House bill. The majority of the committee is in favor of the additional restrictions contained in the Senate bill, and unless very good reason is shown for it will insist on it standing. The strongest opposition is made on behalf of the patent-medicine people speaking through the retail druggists.

I would strongly urge on you that you communicate with as many physicians in the United States and as many medical organizations in United States and as many medical organizations as possible to be reached, that they may thoroughly understand that if they will be kind enough to express their opinion to me in favor of the Senate bill reported as a substitute for the House bill, it will materially aid us in meeting the opposition to the bill.

You will find that the strongest opposition to the Senate bill is from patent-medicine people and retail druggists. I solicit your earnest co-operation in this matter. Of course, I need not assure you that I shall do everything in my power to secure the passage of the bill as reported by the Senate committee.

(Signed) W. B. HEYBURN.

The Antiquity of Castor Oil.—According to the *Medical Age*, Professor Larit of France says that some of the seeds of the castor oil plant found in Egyptian tombs at Thebes could not be less than 3,000 years old, and were perfectly preserved, the oil which they contained being simply rancid. Larit has translated an ancient papyrus, which goes to show that the uses to which the ancient Egyptian put the oil were much the same as those of the present day.

Cocain in Postpartum Hemorrhage.—Dr. C. Fox of Caerphilly writes to the *British Med. Jour.* as follows: I was called suddenly to a case of postpartum hemorrhage. I could see at a glance the patient was in an exceedingly grave condition. Uterus on examination, flaccid; hemorrhage profuse, the countenance portraying approaching death. Having no ergotin, I bethought me of a solution of cocain hydrochlorate I happened to have in my bag. I immediately injected a quantity equal to 1½ grains, and in the course of two minutes at most the uterus had contracted, the hemorrhage had ceased, and the facial expression completely altered. The patient then spoke in her usual voice and said she felt "quite well." She made an uninterrupted recovery. I should be very glad to hear if any of your numerous readers ever tried cocain in a similar case. I have not heard of it being so used, though I have often inquired. To me the effect was marvelous.

What Makes a Physician.—The skill of a physician is in part similar to that of any other man of science. Primarily he should have a mind of detail and exact thinking. The method of exclusion, "It can not be anything else, so it must be typhoid," is the sign of vagueness, and has diminished with the progress of the laboratory spirit. The able diagnostician recognizes each disease, not by loose, obvious symptoms, but by a variety of exact details, often discoverable only on analysis, and peculiar to that disease. This exact mind for detail makes the physician on the side of diagnosis. When it comes to acting on his understanding, to removing a condition which he understands, other qualities become requisite. No profession in our day has made such progress as the medical, counting surgery as part of it; and its unexampled improvement is part of our progress in science, the field of thought in which the nineteenth century was most notable. In many professions there has been no progress at all, certainly not in law or in the pulpit.—*Collier's.*

The Recognition of Osteopaths.—Much as we may wish to ignore the existence of the osteopaths as a school of physicians, they are securing followers in such numbers and are demanding recognition from the legislative bodies with such positiveness that they have gained firm footing in spite of our protests. We have contented ourselves with passing resolutions in our medical societies while they have labored night and day with greatest earnestness. We have merely "referred the matter to our legislative committees," while they have made pilgrimages to state capitals and have bearded the legislators in their dens. In Arkansas, Oklahoma, Missouri, Michigan and Minnesota the osteopaths have been accorded state recognition and select their own examiners; in Alabama this was prevented only by the vote of the lieutenant governor (who

chanced to be a doctor), after the bill had passed the House and had gained half the votes of the Senate. In Kentucky and Mississippi the osteopaths are putting up a bitter and determined fight, and stand a good chance of securing favorable laws in the next sessions of the legislatures. They are working day and night, summer and winter, week days and Sundays, while the medical profession of the various states pass resolutions or refer to committees and then sink back into their apathetic state. In Illinois, we are told, the osteopaths will demand recognition again in 1905. The systematic work is now on. Their opposing forces, the medical profession of the state, is doing little in preparation for the fray. Twice in the past have these disciples of the sage of Kirksville succeeded in passing bills through both houses of the Illinois legislature. Laws recognizing osteopaths in Illinois would be on our statutes to-day had the action of the medical profession of the state been depended on to check them. In the administration of the late Governor John R. Tanner one bill passed both houses and was promptly vetoed by the governor, though far more pressure was brought to bear on him to sign the bill by the osteopaths than to veto by the medical profession. The last osteopathic bill was killed only by the vigorous veto of Governor Richard Yates. The time may come when the state of Illinois will not have governors who are inclined to protect the medical profession so vigorously. A governor may come who will prefer to listen to the emphatic voices of hundreds of determined osteopaths rather than to the whispered protests of a handful of doctors. Then Illinois will pass favorable osteopathic bills. It is not the osteopath alone who is concerned in this matter. The establishment of a precedent of recognizing all of the mongrel cults, one of which is being born each month, will result in the establishment of a recognized medical fraternity which will be no credit to the state and which will be prejudicial to the interests of every reputable medical man in the state. It is not fair to expect that state authorities will close their ears to the pleas of thousands of voters who demand recognition of the osteopaths and the other cults when the medical profession manifests no interest in their own behalf. It is the duty of the legislators and of the governor to serve most of the people, and there can be no chosen few who will be given favoritism as a matter of course without even the form of asking.—*Chicago Clinic and Pure Water Journal.*

State Boards of Registration.

COMING EXAMINATIONS.

Arizona Board of Medical Examiners, Phoenix, April 4. Secretary, Wm. Duffield, M.D., Phoenix.

Utah State Board of Medical Examiners, Salt Lake City, April 4. Secretary, R. W. Fisher, M.D., Salt Lake City.

Board of Medical Examiners of Montana, Helena, April 5. Secretary, Wm. C. Riddell, M.D., Helena.

North Dakota State Board of Medical Examiners, Grand Forks, April 5. Secretary, H. M. Wheeler, M.D., Grand Forks.

Board of Medical Examiners of the State of California, City Hall, San Francisco, April 5. Secretary, Geo. G. Gere, San Francisco.

Idaho State Board of Medical Examiners, Boise, April 6. Secretary, R. L. Nourse, M.D., Hailey.

Minnesota State Board of Medical Examiners, State Capitol Building, St. Paul, April 5-7. Secretary, C. J. Ringnell, M.D., Minneapolis.

Tennessee State Board of Medical Examiners, Memphis, Nashville and Knoxville, April 6-7. Secretary T. J. Happel, M.D., Trenton.

Illinois State Board of Health, Chicago, April 6-8; April 25-27, and East St. Louis, May 4-6. Secretary, J. A. Egan, Springfield.

Rhode Island State Board of Health, State House, Providence, April 7-8. Secretary, Gardner T. Swarts, M.D., Providence.

State Medical Board of the Arkansas Medical Society, Little Rock, April 12. Secretary, J. P. Runyan, M.D., Little Rock.

Missouri State Board of Health, Kansas City, April 12-14. Secretary, W. F. Morrow, M.D., Kansas City.

West Virginia State Board of Health, Clarksburg, April 12-14. Secretary, Hugh A. Barbee, M.D., Point Pleasant.

Vermont State Board of Medical Censors, Y. M. C. A. Building, Rutland, April 13-14. Secretary, S. W. Hammond, M.D., Rutland.

Board of Medical Supervisors of the District of Columbia, Washington, April 14. Secretary, Wm. C. Woodward, M.D.

Board of Medical Examiners for the State of Texas, Austin, April 21-23. Secretary, M. M. Smith, M.D., Austin.

State Board of Medical Examiners of Iowa, April 14-15 at Keokuk, April 20-21 at Des Moines. Secretary, J. F. Kennedy, M.D., Des Moines.

Nebraska State Board of Health, Lincoln, April 21-23. Secretary, Geo. H. Brash, M.D., Beatrice.

New Mexico Report.—Dr. B. D. Black, Las Vegas, secretary of the New Mexico Board of Health, reports that at the partly oral and partly written examination held at Santa Fe, December 7, 1903, 70 questions were asked on 7 subjects, and a percentage of 65 was required. Half of the four applicants passed.

PASSED.

College.	Year Grad.	Per Cent.
National Medical University, Chicago	(1902)	88 4/7
Saginaw Valley Medical College, Michigan	(1899)	79 4/7

FAILED.

University of Colorado	(1902)	87 4/7
Denver Homeopathic Medical College	(1902)	56 5/7

Association News.

ATLANTIC CITY HOTELS.

A List of the Hotels and Prices—Ample Accommodation for All.

Atlantic City has about 1,200 hotels and boarding houses. Out of these the committee has selected the following houses, with their rates appended, which they can recommend. Comfortable board may be obtained in Atlantic City from $1 per day upward. The minimum rates apply to single rooms without baths, while the per capita rate per day for double rooms in most cases can be slightly reduced when two occupy the same room. For those wishing accommodations on the European plan, the Dunlop and Young's Hotel are exclusively European; the Grand Atlantic, the Wiltshire, the Garden, the Islesworth, and the Rudolf, furnish accommodations on either European or American plans. The prices given below cover the American plan, except those referring to the Dunlop and Young's Hotel.

RATES PER DAY ON AMERICAN PLAN.

Hotels.			
Bouvier	$1.50	and up.	
Roxborough	1.50	to	$2.50
Revere	2.00	to	2.50
Altamont Craig Hall	2.00	to	3.00
Archdale	2.00	and up.	
Belmont	2.00	and up.	
Berkshire Inn	2.00	to	3.00
Chester Inn	2.00	to	2.50
Dunlop, $2.00 to $3.00, European exclusively.			
Young's Hotel, $2.00 to $3.00, European exclusively.			
New Hygeia	2.00	to	3.00
Albermarle	2.00	to	3.50
Arlington	2.00	to	3.50
Holmhurst	2.00	to	4.00
Champlain	2.00	to	4.00
Kenilworth Inn	2.00	to	4.00
Hotel Majestic	2.00	to	4.00
Hotel Boscobel	2.00	to	6.00
Chatham	2.50	to	3.00
Glaslyn	2.50	to	3.00
Hotel New England	2.50	to	3.00
Ponce de Leon	2.50		
Wiltshire (also European)	2.50	and up.	
Hotel Imperial	2.50	to	3.50
Hotel Shoreham	2.50	to	3.50
Lorraine	2.50	to	3.50
Rittenhouse	2.50	to	4.00
Grand Atlantic (also European)	2.50	to	5.00
Raleigh	3.00		
Hotel Gladstone	3.00	to	5.00
Hotel Savoy	3.00	to	5.00
Hotel Strand	3.00	to	5.00
Haddon Hall	3.00	to	7.00
Islesworth (also European)	3.00	to	8.00
Shelburne	3.50	to	5.00
Seaside	3.50	to	4.00
(Rudolf (also European)	3.50	to	5.00
Garden	3.50	to	6.00
Hotel Dennis	3.50	to	6.00
Royal Palace	3.50	to	6.50
Hotel Windsor	3.50	to	7.00
Hotel Chelsea	4.00	and up.	
St. Charles	4.00	and up.	
Hotel Traymore	4.00	to	8.00
Hotel Brighton	4.00	to	10.00
Marlborough House	4.00	to	10.00

In order to get good accommodations engagements for rooms should be made without delay. The committee will be glad to furnish any information desired, and will be pleased to engage quarters at the various hotels, or physicians may write to the hotel direct.

WM. EDGAR DARNALL,
Chairman Hotel Committee.

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, week ending March 19, 1904:

Raymond, Thos. U., surgeon, on being relieved from duty at Jefferson Barracks, Mo., by Major Wm. B. Banister, surgeon, will proceed to St. Louis for special duty at the Louisiana Purchase Exposition, with a view to exercising supervision over the sanitary conditions on the grounds.

De Lodfre, Samuel M., asst.-surgeon, granted fourteen days' leave April 1, with permission to apply for seven days' extension.

Gosman, Geo. H. R., asst.-surgeon, relieved from duty at Fort Duchesne, Utah, and ordered to Camp Geo. H. Thomas, Ga., for duty.

Slier, Jos. F., asst.-surgeon, granted fourteen days' leave.

Navy Changes.

Changes in the medical corps of the Navy, week of March 26:

Green, E. H., medical inspector, detached from the *Kentucky* and ordered to the *New Orleans*.

Plummons, P., medical director, to Navy Yard, Washington, D. C.

Bishop, L. W., asst.-surgeon, detached from the *Annapolis* and ordered to the Naval Hospital, Mare Island, Cal., for treatment.

Munson, F. M., asst.-surgeon, detached from the *Prolic* and ordered to the Naval Station, Polok, P. I.

Traynor, J. P., asst.-surgeon, detached from the Naval Station, Polok, P. I., and ordered to the *Prolic*.

McClanahan, R. K., asst.-surgeon, ordered home and granted sick leave for three months.

Ledbetter, R. E., asst.-surgeon, detached from the *Newark* and ordered home to wait orders.

Pryor, J. C., P. A. surgeon, detached from the *Bancroft* and ordered home to wait orders.

Plummer, R. W., P. A. surgeon, from the *Maine* to the *Bancroft*.

McDonnold, P. E., asst.-surgeon, detached from the *Olympia* and ordered home to wait orders.

The following assistant surgeons are detached from the U. S. Naval Museum of Hygiene and Medical School, Washington, D. C., and ordered to the following positions, respectively:

Aitken, P. G., to Mare Island Station, San Francisco.

Smith, W. B., to the *Olympia*.

Kohlhase, O., to the *New York*.

Randall, J. A., to the *Maine*.

Hennig, W. H., Horn, W. S., Verner, W. W., Grieve, C. C., DeBruler, J. P., Dean, F. W. S., Dykes, J. R., and Geiger, A. J., to the Asiatic Station, via the *Solace*.

Scott, R. L., to the *Massachusetts*.

Dorsey, R. H., to the *Illinois*.

McLean, A. D., to the *Alabama*.

Manchester, J. D., to the *Columbia*.

Rider, C. E., to the *Missouri*.

Fugh, Jr., W. S., to the *Prairie*.

Pease, T. N., to the *Hartford*.

Reeves, I. S. K., to the *Minneapolis*.

Sutton, R. L., to the Bureau of Medicine and Surgery, Navy Department.

Ely, C. F., Dessez, P. T., to the Naval Academy, Annapolis.

Woodward, J. S., to Indian Head.

Biggs, R. E., to the *Newark*.

Rossiter, P. S., to Baltimore Recruiting Station.

Marine-Hospital Service.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service, for the seven days ended March 24, 1904:

Carter, H. R., surgeon, to report at Bureau for special temporary duty.

Peckham, C. T., surgeon, and Smith, A. C., P. A. surgeon, detailed for duty on Revenue-Cutter Service retiring board at New York.

Keenan, M. J., P. A. surgeon, to proceed to Boston, Albany and New York on special temporary duty.

McMullen, John, P. A. surgeon, Bureau order of Feb. 20, 1904, directing him to report to chief quarantine officer of Hawaii for duty, revoked.

Foster, M. H., P. A. surgeon, granted leave of absence for ten days from March 30.

Lumsden, L. L., P. A. surgeon, relieved from duty at New Orleans and directed to proceed to Vera Cruz, Mexico, for duty in office of the United States Consul.

King, W. W., asst.-surgeon, granted leave of absence for six days from March 18.

Goldberger, Joseph, asst.-surgeon, relieved from duty in Hygienic Laboratory and directed to proceed to Tampico, Mexico, for duty in office of the United States Consul.

Roberts, Norman, asst.-surgeon, relieved from duty at San Diego, Cal., and directed to proceed to New Orleans, and report to medical officer in command for duty and assignment to quarters.

Balmon, T. W., asst.-surgeon, relieved from duty at Philadelphia and directed to proceed to New York (Stapleton) and report to medical officer in command for duty and assignment to quarters.

Baker, E. C., A. A. surgeon, granted leave of absence for three days from March 19, 1904, under Paragraph 191 of the Regulations.

Mackall, B. McV., A. A. surgeon, granted leave of absence for fifteen days from March 31.

Tidd, R. M., A. A. surgeon, granted leave of absence for fourteen days from April 1.

BOARD CONVENED.

Board convened at Washington, D. C., March 25, 1904, for the physical examination of an officer of the Revenue-Cutter Service. Detail for the board: Asst.-Surgeon-General L. L. Williams, chairman; Asst.-Surgeon-General W. J. Pettus, recorder.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the week ended March 25, 1904:

SMALLPOX—UNITED STATES.

California: San Francisco, March 6-13, 4 cases, 4 deaths.
Delaware: Wilmington, March 12-19, 1 death.
District of Columbia: Washington, March 12-19, 1 case.
Florida: Jacksonville, March 12-19, 2 cases.
Illinois: March 12-19, Chicago, 5 cases; Danville, 1 case; Galesburg, 3 cases.
Kentucky: Covington, March 12-19, 1 case.
Louisiana: New Orleans, March 5-19, 3 cases, 2 imported.
Maine: Bradley, March 18, 2 cases; Madawaska region, March 12-19, 7 cases.
Maryland: Baltimore, March 12-19, 1 case.
Massachusetts: March 12-19, Fall River, 1 case; Lowell, 1 case.
Michigan: March 12-19, Detroit, 1 case; Grand Rapids, 1 case.
Missouri: St. Louis, March 12-19, 6 cases.
New Jersey: March 12-19, Camden, 6 cases, 1 death; Trenton, 1 case.
New York: March 12-19, Buffalo, 1 case; New York, 1 death; Niagara Falls, 4 cases.
Ohio: Cleveland, March 11-18, 3 cases, 1 death; Dayton, March 12-19, 8 cases, 1 death; Hamilton, Jan. 30-Feb. 6, 1 case.
Pennsylvania: March 12-19, Allentown, 3 cases; Altoona, 1 death; Philadelphia, 30 cases, 7 deaths; Pittsburg, 1 case, 1 death; Williamsport, 1 case; Carbondale, March 14-21, 2 cases.
Tennessee: March 12-19, Memphis, 21 cases; Nashville, 13 cases.
Wisconsin: Milwaukee, March 12-19, 6 cases.

SMALLPOX—FOREIGN.

Austria: Feb. 27-March 5, Prague, 4 cases; Trieste, 1 case.
Belgium: Antwerp, Feb. 27-March 5, 7 cases, 3 deaths; Brussels, Feb. 20-March 5, 2 deaths.
Brazil: Bahia, Feb. 13-20, 1 death; Pernambuco, Feb. 1-15, 17 deaths; Rio de Janeiro, Feb. 7-14, 128 cases, 67 deaths.
China: Feb. 3-10, Shanghai, 16 cases, 1 certain, reported.
France: Lyons, Feb. 20-27, 1 death.
Great Britain: Feb. 27-March 5, Edinburgh, 6 cases, 2 deaths; London, 13 cases; Manchester, 1 case; Nottingham, 14 cases, 1 death; South Shields, 1 case; Glasgow, March 4-11, 19 cases, 1 death; Sheffield, Feb. 20-27, 4 cases.
India: Bombay, Feb. 16-23, 20 deaths; Karachi, Feb. 14-21, 4 cases, 2 deaths.
Java: Batavia, Feb. 6-13, 19 cases, 9 deaths.
Mexico: City of Mexico, Feb. 28-March 6, 9 cases, 5 deaths; Vera Cruz, March 5-12, 1 case, 1 death.
Netherlands: Amsterdam, March 5-12, 1 case, 1 death.
Russia: Moscow, Feb. 17-24, 13 cases, 1 death; Odessa, Feb. 27-March 5, 1 case; Warsaw, Feb. 28-March 6, 11 deaths.
Spain: Barcelona, March 1-10, 9 deaths; Santander, Feb. 29-March 7, 3 cases.
Turkey: Constantinople, Feb. 28-March 6, 5 deaths.

SMALLPOX—INSULAR.

Philippine Islands: Antimonan, Feb. 5-12, present; Cebu, Jan. 1-31, 5 cases, 1 death.

YELLOW FEVER.

Brazil: Rio de Janeiro, Feb. 7-28, 15 cases, 4 deaths.
Mexico: March 6-12, Merida, 1 case, 2 deaths; Tehuantepec, 4 cases; Vera Cruz, March 5-12, 1 death.

CHOLERA—INSULAR.

Philippine Islands: Jan. 30-Feb. 6, Manila, 2 cases, 2 deaths; Provinces, 53 cases, 35 deaths.

CHOLERA—FOREIGN.

Turkey in Asia: Basra, Feb. 6-12, 6 cases, 3 deaths.

PLAGUE—INSULAR.

Philippine Islands: Manila, Jan. 30-Feb. 6, 3 cases, 2 deaths.

PLAGUE—FOREIGN.

Brazil: Para, Feb. 15, 2 cases; Rio de Janeiro, Feb. 7-28, 13 cases, 6 deaths.
India: Bombay, Feb. 16-23, 718 deaths; Karachi, Feb. 14-21, 97 cases, 74 deaths.

Medical Organization.

Arkansas.

SEARCY COUNTY MEDICAL SOCIETY.—On March 2, physicians of the county assembled at Marshall and organized a county society, with a charter membership of 7, and the following officers: Dr. William F. Rogers, St. Joe, president; Dr. Perry G. Hays, Blanco, vice-president; Dr. Samuel G. Daniel, Marshall, secretary; Dr. J. Oliver Cotton, Leslie, treasurer, and Dr. James A. Henley, St. Joe, librarian.

Louisiana.

BIENVILLE PARISH MEDICAL SOCIETY.—Physicians of the parish met at Bienville, March 17, and organized a medical society with the following officers: Dr. Francis M. Thornhill, Arcadia, president; Dr. Andrew J. Pennington, Gibsland, vice-

president; and Dr. Oliver O. Hamner, Bienville, secretary and treasurer.

Missouri.

MARIES COUNTY MEDICAL SOCIETY.—This society has been organized on the standard plan with the following officers: Dr. Otto C. Fritts, Belle, president; Dr. William E. Johnson, Lois, and Dr. Otto N. Schudde, Vienna, secretary and treasurer.

Ohio.

TRUMBULL COUNTY MEDICAL SOCIETY.—Dr. Thomas C. Martin, Cleveland, met with physicians of the county at Warren, March 19, and after setting forth the benefits to be derived from standard organization, assisted in the reorganization of the society on that plan. The officers of the temporary organization are: Dr. Frederick K. Smith, Warren, president; Dr. Curtis C. Williams, Niles, secretary, and Drs. Smith, Williams and Delbert E. Hoover, Warren, committee on constitution, by-laws and permanent organization.

Texas.

PALO PINTO COUNTY MEDICAL ASSOCIATION.—At a meeting of physicians of the county held at Mineral Wells, March 14, organization was effected on the standard plan, and the following officers were elected: Dr. John M. Luttrell, Mineral Wells, president; Dr. Robert H. Smith, Palo Pinto, vice-president; Dr. Robert L. Yeager, Mineral Wells, secretary and treasurer; Dr. Horatio B. Withers, Mineral Wells, censor, and Dr. Benjamin R. Beeler, Mineral Wells, delegate to the state association.

Wisconsin.

INTER-COUNTY (BUFFALO AND PEPIN) MEDICAL SOCIETY.—A meeting of physicians of the two counties was held in Durand, March 17, at which a medical society was organized with seven members and the following officers: Dr. Milton B. Axtell, Pepin, president; Dr. Jacob S. Tenney, Alma, vice-president; Dr. Philip B. Amundson, Mondovi, secretary, and Dr. Edmund C. Jacobs, Durand, treasurer.

Society Proceedings.

COMING MEETINGS.

Medical Association of the District of Columbia, Washington, April 5.
Tennessee State Medical Association, Chattanooga, April 12.
South Carolina Medical Association, Darlington, April 13.
Medical Association of the State of Alabama, Mobile, April 19.
Medical Society of the State of California, Paso Robles, April 19-21.
Florida Medical Association, Live Oak, April 20.
Medical Association of Georgia, Macon, April 20.
Mississippi State Medical Association, Jackson, April 20.
Texas State Medical Association, Austin, April 26.
Medical and Chirurgical Faculty of Maryland, Baltimore, April 26-28.
Arizona Medical Association, Tucson, April 27-28.

AMERICAN SOCIETY OF TROPICAL MEDICINE.

First Annual Meeting, held at the College of Physicians, Philadelphia, March 21, 1904.

Leprosy and Dysentery Specimens.

DR. W. M. L. COPLIN presented specimens of hands showing the lesions of anesthetic leprosy, one of which showed a nerve with the leprous nodules. He also exhibited specimens showing the lesions of amebic and bacillary dysentery. In one of the cases the *Amœba coli* was demonstrated during life and the Shiga bacillus was obtained from the intestine post-mortem. He also showed specimens of hepatic abscesses following both amebic dysentery and bacillary dysentery. He also showed a duodenum with the *Uncinaria duodenale* in situ.

DR. JUDSON DALAND said that the Japanese physicians, who see a number of cases of uncinariasis, believe that the cases of pernicious anemia that seem to arise from infection with that parasite are due to the hemorrhages from the intestinal wall following the death and removal of the worm, which attaches itself intimately to the mucosa.

Leishman-Donovan Bodies.

DR. JOSEPH MCFARLAND, through the kindness of Sir Patrick Manson, exhibited some slides showing the Leishman-Donovan parasites. These were first described by Maj. W. B. Leishman in May, 1903, who found them in the blood of patients suffering from dum-dum fever, which was formerly supposed to be of a malarial nature, presented, when admitted to Netley, an extreme degree of cachexia, an irregular, remittent type of fever, grave anemia, progressive muscular atrophy and great enlargement of the spleen. Digestive and bowel disturbances were frequent. In none of the cases admitted to Netley were malarial parasites found in the blood, nor was there any record of these organisms having been found at an earlier stage of the disease. On making smear preparations from the splenic pulp from one of the cases, Leishman found large numbers of small, round or oval bodies unlike anything previously seen or described. On staining with Romanowsky's method they were found to possess a quantity of chromatin of a definite and regular shape, which differentiated them from blood plates or possible nuclear detritus. The chromatin appeared in the form of a circular mass or ring with a smaller chromatin mass in the form of a short rod applied at a tangent or perpendicularly to it. Later, Donovan reported finding similar bodies in smears taken postmortem from the enlarged spleens of natives who had died of what was supposed to be chronic malaria. Still later he found similar bodies in the smears made after a splenic puncture during life from a boy aged 12 years, who had no malarial parasites in his peripheral blood. The bodies described by Donovan were afterward examined by Ross, who determined that they were in every way identical with those discovered by Leishman. Up to Nov. 5, 1903, Donovan found the bodies in 16 cases after puncture of the spleen and the liver during life. In January, 1904, Manson and Low tapped the enlarged spleen of a man from Darjeeling and found a large number of the parasites. The bodies have not been found in the circulating blood nor have they been found in the feces or the urine of the host. An attempt to cultivate the parasites on blood agar failed.

Hymenolepis Nana.

DR. ALLEN J. SMITH, in his own name and that of Dr. L. E. Magnenat of Amarillo, Texas, exhibited specimens of the adult *Hymenolepis nana* and its ova. This worm was first encountered by Bilharz as a human parasite in Cairo, in 1851; and since then it has been mainly found in the same general locality, but especially in Italy. Instances from central Europe, from France, England, South America and elsewhere are also on record. In the United States, Spooner announced a case in 1872, from Philadelphia, and his specimens are deposited in the collection of the College of Physicians. The case has, however, been placed in doubt by Leuckhart and others, and Dr. Smith knows of no effort to verify or positively contradict the question which has arisen. This single case of Spooner being omitted as possibly being *Tenia flavopunctata*, the first instance of the parasite in the United States was found in Galveston, Texas, in 1892, by Moore and Elliott in a railway laborer applying for relief of a troublesome and persistent diarrhea in the St. Mary's Infirmary. The specimens recovered from the stools were offered the writer for identification. Following this case, Stiles, in his systematic examination of intestinal dejecta in Washington and some of the southern states, found 4 instances of the same parasite; and following his efforts the widespread study of stools for parasites led, before the announcement of the material here presented, to the recognition of perhaps a dozen more cases in this country. So far as Dr. Smith now is aware, the cases from which this material was obtained, 3 children of one family in Amarillo, Texas, are Nos. 17, 18 and 19 in the American literature. The cases were discovered in the spring of 1903 by Dr. L. E. Magnenat, a practitioner of medicine at Amarillo, who furnished the specimens that Dr. Smith showed. All the patients were young, badly nourished and neurotic children, and the discovery of the ova in the stools followed the search for the ova of uncinaria, which Dr. Magnenat suspected because of the anemia and general undernutrition. The energetic use of anthelmintics was followed by the recovery from the stools of between 500 and 1,000 specimens. At the time of last information the persistence of ova in the stools indicates that the parasites have not been entirely dislodged. The worm has been regarded by Grassi and others as identical with

Hymenolepis murina of rats, although others have denied this point (Moriez). Grassi has shown that it is possible to infect young white rats (from 1 to 4 months old) directly by feeding ripe links of *Hymenolepis murina* without an intermediate host (although probably ordinarily an intermediate host of some arthropod, as fleas or lice, harbor the cysticercoid of the worm). Dr. Smith has endeavored, by feeding human stools containing eggs of *H. nana* over a period of 8 weeks, to infect white rats of selected age, but has systematically failed. Thus far he has not been in a position to infect by means of an intermediate host. The specimens when fully developed are usually 10 to 15 mm. long and ½ to ¾ mm. wide at the widest part. The head is subspherical, a little over ¼ mm. in diameter, provided with a retractile rostellum, armed with a single row of 24 to 30 hooklets; and with 4 rounded suckers, 90 to 105 microns in diameter. The neck is long, gradually merging with the head. The first segments are very short and not well defined, the succeeding ones gradually growing broader and longer until, when complete, they measure 0.14 to 0.20 mm. in length and 0.4 to 0.8 or 0.9 mm. in width; the last ones a little narrower and longer. The eggs are round or slightly oval, double walled and measure from 40 to 45 microns to 50 or 55 microns. The contained embryo measures from 20 to 24 microns. Each embryo is provided with 6 hooklets. In the space between the inner and the outer wall are seen several small thread-like bodies of unknown importance. There is a small papilla at each end of the embryophore.

Officers Elected.

The following officers were elected for the ensuing year: President, Dr. Thomas H. Fenton; vice-presidents, Drs. J. J. Kinyoun and James M. Anders; treasurer, Dr. Alfred Hand; secretary, Dr. Joseph McFarland; assistant secretary, Dr. John M. Swan; councilors, Drs. Roland G. Curtin, Judson Daland, John V. Shoemaker, Allen J. Smith and W. M. L. Coplin.

BUFFALO ACADEMY OF MEDICINE.

Regular Meeting of the Section on Pathology, held March 15, 1904.

The Serum Test for Blood.

DR. HERBERT U. WILLIAMS demonstrated the serum test for blood as a means of detecting human blood in medicolegal cases. The biologic or precipitin reaction was discovered incidental to experimental work in animals on artificial immunity in infectious diseases. When an animal receives injections of foreign material into the blood, it develops a condition comparable to that of immunity. The blood serum of such an animal requires three properties: (1) That of destroying or disintegrating cells as in immunizing animals for bacteria; (2) the serum develops the property of agglutinating the same cell as the agglutinating reaction in typhoid fever (Widal serum reaction) or the agglutination test for *Bacillus pyocyaneus*, streptococci, pneumococci, etc.; (3) when blood is injected into an animal it can agglutinate the serum of animals of the same species and acquire the property of inducing a precipitate. So that if the egg albumin of a hen is injected into a rabbit the serum of the rabbit will form a precipitate with the egg albumin of the animal from which the egg is derived or its serum.

This principle has been applied to the blood of various animals, including that of man. Uhlenhuth first showed it, then Nuttall also. Nuttall examined the blood of a large number of animals, including man, and got the reaction, finding it negative in only the orang outang, chimpanzee and gorilla. A student of Nuttall also applied the blood test on blood stains obtained from Scotland Yard detective office, such as on knives, leather, etc., and though the stains were of all ages he could make a positive test for human blood from the oldest stains.

The method is briefly as follows: Human blood is obtained from any source, placenta, fetus, etc., and 30 to 60 c.c. are injected into the rabbit at intervals of 3 days to a week, over a period of two to three months, injecting 5 to 10 c.c. at a time. One to two weeks after the last injection the blood of the rabbit acquires its greatest potency. The rabbit is then bled from the carotid artery into a clean flask and the serum separated.

The blood clot or suspected blood stain is dissolved in distilled water and then mixed with double normal salt solution. This dilution of distilled water and salt solution and blood should be in the proportion of 1-50 to 1-100. To this solution the serum of the blood from the rabbit is added in a test tube, and if the test is positive a precipitate is formed.

Dr. Williams referred to the detection of human blood by measuring the red corpuscles. The diameter of the red corpuscle of man is 1/3200 of an inch, and of the dog and the rabbit nearly the same size, about 1/4000 of an inch. This method may be at fault, for it is known that the red blood corpuscles vary greatly in size in anemias, especially pernicious anemia.

Dr. Williams used the precipitin test. He used serum of rabbits inoculated with blood from a fetus and from a placenta and with pleuritic fluid, and in the fourth rabbit beef blood was used. The control experiments were made with the blood of pig, rabbit, horse, guinea-pig, rat, cat and sheep. The precipitin test was obtained with human and beef blood best; it also was obtained from the horse's blood and from that of a dog.

Dr. Williams states that the procedure is by no means simple, as it requires two to three months to get the rabbit's serum fortified so that it can be used. This makes it unpractical in medicolegal cases in which the time given for such an investigation is often short. He was very careful in his technic, but from the behavior of the reaction in his experiments thus far he does not believe this serum test for human blood is safe, for it is inconstant.

Case Reports.

DR. DELANCEY ROCHESTER showed an aneurism of the arch of the aorta, with calcareous deposit on the aortic valve. It was from a hard-working farmer between 50 and 60 years of age. There was no history of any illness which might result in an aneurism. There were few subjective symptoms of aneurism and no pressure symptoms. The manner of death was unknown.

DR. ALBERT E. WOEHNERT demonstrated slides from a case of pernicious anemia with blood crisis.

DR. CHARLES A. BENTZ demonstrated a male and a female *Anchylostomum duodenale* and the eggs.

DR. WILLIAM MOSHER spoke of his experiences with the purinometer. It is an instrument to detect the amount of purin bodies excreted in the urine. The amount excreted is dependent on the amount of nitrogenous material ingested and also on the metabolism of the body.

DR. CARROL ROBERTS reported a case of aortic stenosis in a young woman suffering from tertiary syphilis.

RHODE ISLAND MEDICAL SOCIETY.

Business Meeting, held in Providence, March 3, 1904.

The President, Dr. William R. White, in the Chair.

The secretary, Dr. Stephen A. Welch, reported the membership to be 303, of whom 275 were active members.

The treasurer, Dr. George S. Mathews, reported a cash balance for the year of $621.62.

Officers Elected.

The following were elected officers for the ensuing year: President, Dr. William R. White, Providence; vice-presidents, Drs. Christopher F. Barker, Newport, and Charles V. Chapin, Providence; recording secretary, Dr. Stephen A. Welch, Providence; corresponding secretary, Dr. Herbert Terry, Providence; treasurer, Dr. George S. Mathews, Providence; delegate to the House of Delegates of the American Medical Association, Dr. John Champlin, Westerly; alternate, Dr. F. T. Rogers.

Constitution Revised.

The society unanimously voted to accept the revision of the constitution and by-laws which was drawn on the lines proposed by the American Medical Association. This revision has been in charge of a committee consisting of Drs. John

Champlin, F. T. Rogers, William R. White and George F. Keene.

Prize Essay Contest.

President White announced a prize of $500, offered by a member of the society for an essay by any member of the medical profession on the subject, "Postoperative Phlebitis." Every competitor for this prize is expected to forward to the president, Dr. William R. White, 7 Greene Street, Providence, R. I., on or before Feb. 1, 1905, a copy of his dissertation, legibly written, preferably in type and suitably bound, so as to be easily handled. The writer's name and address must be enclosed in a sealed envelope bearing on the outside a motto corresponding with one on the accompanying dissertation. Any clew given by the dissertation or any action on the part of the author which may reveal his name before the award of the prize will disqualify him. In case no dissertation is considered sufficiently meritorious, no award will be made. A high value will be placed on original work. Letters accompanying the unsuccessful dissertations will be destroyed unopened and the dissertation may be procured by their respective authors if application be made within three months after the announcement of the award.

Papers Read.

Dr. Herbert Terry read a paper on "Tumors of the Blauder," Dr. W. Louis Chapman one on "Postoperative Pneumonia with Experiments on Its Pathogenesy," and Dr. William F. Gleason one on the "Care of the Feeble-Minded."

Care of Feeble-Minded Children.

The society then passed the following resolution:

WHEREAS, It is the sense of this meeting that the care and training of the feeble minded are the concern of the state and should be pursued as an integral part of our system of public education and not as a charity; and

WHEREAS, It is sound public policy as well as to the advantage of the afflicted that such education for Rhode Island children should be provided by an institution in this state; therefore, be it

Resolved, That the legislative committee of this society be requested to present to the consideration of the honorable general assembly an adequate plan for putting into effect the education of feeble-minded children through the establishment by the state of a suitable home and school.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Laxative in Pregnant Women.

The following combination is recommended by Lutaud in *Jour. de Med. Interne*, as a laxative to relieve the constipation of pregnant women:

℞.	Olei ricini	ʒi	30
	Syr. rhei	ʒvi	24
	Alcoholis	ʒss	15
	Ol. menth. pip.	ʒss	2

M. Sig.: At one dose.

Gastric Ulcer.

In the treatment of gastric ulcer, Hayden, in *Ther. Gaz.*, recommends that the patient be put to bed and given only a small amount of food, consisting of a quarter of a glass of milk every two hours, this to constitute the diet for four days.

Enemas are recommended three times a day, consisting of the following:

℞.	Dry peptones	ʒi	30
	Yolk of two eggs		
	Aquæ (warm)	ʒvii	200

M. Sig.: To be introduced into the bowel after a cleansing enema.

The quantity of milk may be increased to half a glass every two hours; on the eighth day to three-quarters of a glass, and on the twelfth day to a full glass, but not to exceed three quarts in the twenty-four hours. After twenty days, if vomiting does not take place and the milk is digested well, the quantity may be diminished and solid food given progressively as follows: Milk soup three times a day; soft boiled eggs, broth, broth with the yellow of an egg, meat juice, custard; white meat, soft and boiled; mashed vegetables and last of all bread. He recommends the following to combat the gastric irritation and thus allay the tendency to vomit:

℞.	Bismuthi subnit.	ʒv	20
	Aquæ	ʒiii	90

M. Sig.: Shake the bottle and take the entire amount at one dose.

This may be repeated as necessary and warm fomentations applied to the epigastrium. This line of treatment may be continued for two weeks, when the following combination may be substituted:

℞.	Sodii sulph.		
	Sodii bicarb., ää	xlv	3
	Sodii chloridi	gr. xv	1
	Aquæ q. s. ad	Oii	1000

M. Sig.: Warm the solution and drink a glassful daily in divided doses.

Hemorrhoids.

The following outline of treatment is recommended by Preissmann in *Ther. Gaz.*, in the treatment of hemorrhoids:

℞.	Pot. iodidi	gr. xxx	2
	Iodi (pure)	gr. iii	20
	Glycerini	ʒi	30

M. Sig.: Apply locally once an hour on absorbent cotton.

Or a stronger solution as follows:

℞.	Pot. iodidi	gr. lxxv	5
	Iodi (pure)	gr. xxx	2
	Glycerini	ʒi	30

M. Sig.: Apply locally on cotton every two hours after taking a tepid sitz bath.

Iodin in Pulmonary Tuberculosis.

Delearde, in *Bul. Gen. de Ther.*, recommends the following combination containing iodin in the treatment of pulmonary tuberculosis:

℞.	Tinct. iodi	ʒiiss	10
	Pot. iodidi	gr. xv	1
	Glycerini	ʒv	20
	Syr. aurantii corticis	ʒvi	25
	Aquæ q. s. ad	ʒxvi	500

M. Sig.: One dessertspoonful twice a day before meals well diluted in water.

This line of treatment seems to improve the digestion, acts as a tonic, and decreases the tendency to vomit.

Diabetes.

In the treatment of diabetes W. H. Thomson, in *Amer. Med.*, states that he rarely employs opium, codein or other opium derivatives, as they only relieve the symptoms for a time and do not change the nutrition of the tissues. The author recommends, as being of more permanent benefit, the use of cod-liver oil, and the younger the patient the freer the use of this remedy. So long as the stomach does not become deranged too much cod-liver oil can not be taken. It both diminishes the sugar and the excess of urea. Obesity and sedentary habits are contraindications to its use. Next to cod-liver oil the author mentions iron as a remedial agent in diabetes; acting as an oxygen carrier, it should be given in as large doses as possible along with plenty of fresh air. The following well-known combination is recommended in order to avoid constipation:

℞.	Ferri sulph.	ʒss	2
	Pulv. senna		
	Pulv. jalapæ		
	Potass. tartratis		
	Pulv. zingiberis, ää	gr. ii	75
	Ext. gentianæ q. s.		

M. Ft. pil. No. xxx. Sig.: One to three pills three times daily.

Arsenic is also recommended, given in the form of arsenous acid or Fowler's solution.

For a speedy reduction in the amount of sugar the following combination is recommended:

B. Antipyrini		
Sodii benzoatis, āā	gr. xv	1

M. Sig.: To be taken at one dose and repeated four times daily.

After a time the following containing aspirin is substituted:

B. Aspirin	gr. xv	1
Bismuthi salicylatis	gr. x	65

M. Sig.: At one dose three or four times a day.

In subacute cases the following outline of treatment is recommended:

B. Benzosol	gr. xlviii	3 20
Sodii benzoatis	ʒiv	15
Acidi arsenosi	gr. i	06
Sodii salicylatis	ʒiii	12

M. Ft. cap. No. xlviii. Sig.: Two capsules one hour after meals and at bedtime; or:

B. Sodii sulphocarbol.	ʒii	8
Salicini	ʒi	4
Phenacetini	ʒii	8
Ammon. benzoatis	ʒiv	15

M. Ft. capsulæ No. xlviii. Sig.: Two capsules one-half hour after meals.

If there be much insomnia the following combination is recommended, taken at bedtime:

B. Strontii bromidi	gr. xx	1 30
Antipyrini	gr. xv	1

M. Ft. chart. No. i. Sig.: To be taken at bedtime.

A dose of blue mass is administered once a week to patients after middle life. The following powder is of service in some cases to relieve the constipation:

B. Sodii bicarb.	ʒiss	6
Sodii sulph.		
Mag. sulph., āā	gr. xxx	2
Sodii salicylatis	gr. x	65

M. Ft. chart. No. i. Sig.: To be taken at bedtime.

Arsenic remains as one of the important remedies in diabetes, diminishing, as it does, the formation of glycogen. It has been recommended by Martindale combined as follows to form the bromid:

B. Potass. carb.		
Acidi arsenosi, āā	gr. xv	1
Aquæ destil.	ʒiiss	75

M. Boil until dissolved. When cold add:

Bromi	ʒss	2
Aquæ destil. q. s. ad	ʒiii	90

Sig.: From one to three or five drops once or twice daily.

In the symptomatic treatment of diabetes, Stewart, in the "Text-Book of Applied Ther.," recommends a weak alkaline water such as Vichy or Apollinaris to relieve the thirst, which is usually present proportionate to the amount of sugar present. To allay the craving for food there is no better agent than opium or a little alcoholic stimulant. For constipation he recommends the following pill:

R. Ext. cascaræ		
Ext. aloes, āā	gr. ii	12

M. Ft. pil. No. i. Sig.: To be taken at night and followed the next morning by a saline laxative.

Lecithin.

In an abstract in *Med. Rev. of Reviews* Henri Labbé discusses the physiologic and therapeutic properties of lecithin which is extracted from the brain and from eggs. It produces favorable changes in metabolism, weight, appetite, urinary changes, osteogenesis, nerve elements and the blood. Therapeutically it has been found of great value in the treatment of rachitis when substituted for the phosphates; in neurasthenia and anemia it increases the appetite, restores strength and improves the general condition. In phosphaturia it can be substituted for the phosphates. It has also been found beneficial in the treatment of diabetes; in cachexias and in convalescence it restores strength, increases the flow of urine and in some cases it acts on the heart when digitalis fails. It has also been recommended in lymphatism of children and in tuberculosis. D. R. Brower has derived good results from the use of lecithin in neurasthenia in connection with or alternating with the glycerophosphates. He prescribes it in the form of the granular lecithin, giving 5 grains (.30) three times a day, or the glycerol of lecithin one dram (4.00) at a dose after meals. In rachitic cases it may be combined as follows:

B. Lecithin (dissolved in chloroform)	gr. xxx	2
Olei morrhuæ	ʒiv	120

M. Sig.: One dessertspoonful to a tablespoonful after each meal.

It has also been recommended in the form of an emulsion as follows:

B. Lecithin	gr. vi-xii	25-.50
Pulv. acaciæ	ʒss	15
Olei amygdalæ	gtt. xv	1
Aquæ laurocerasi q. s. ad	ʒiv	120

M. Sig.: One tablespoonful three times a day after each meal.

Medicolegal.

Valid Release in Personal Injury Case.—The Supreme Court of Nebraska holds, in the case of Osborne vs. Missouri Pacific Railway Company, that a party who, having the capacity and opportunity to read a release of claims for damages for personal injuries signed by himself, and not being prevented by fraud practiced on him from so reading it, failed to do so, and relied on what the other party said about it, is prevented by his own negligence from asserting that the release is not legal and binding on him according to its terms.

Not Traveling Physician Under Statute.—The Court of Criminal Appeals of Texas reverses in Adams vs. State a conviction of the former of pursuing the occupation of a medical specialist traveling from place to place, without having paid the occupation tax prescribed by article 5049 of Sayles' Revised Civil Statutes of 1897. It says that the undisputed facts showed that he came to G. about May 1, 1903, and established and equipped an office; that he maintained an office at E., and at J. and B.; that he divided his time between these offices, and kept an assistant at each place, and treated patients at the places at stated intervals; that prior to coming to G. he had his headquarters and lived at M., and had practiced there and at J., and had lived at M. 18 months; that on leaving M. he moved with his wife and children to G., where they lived at a hotel up to within three weeks of the time of filing the information, when his wife and children went on a visit to relatives at Q. He received his mail at G., which was his headquarters, and practiced nowhere except at his offices before mentioned. In the court's opinion these facts did not constitute him a traveling physician as contemplated by said article 5049.

Expert Witnesses and Special Compensation.—The Supreme Court of Illinois says, in Chicago City Railway Co. vs. Handy, a personal injury case brought by the latter party, that it is competent to show that a witness has charged or expects to receive greater compensation than the fees allowed by the statute, and that he is in the employ of one of the litigants regularly or frequently as an expert witness, or to prove facts and circumstances which would naturally create a bias in the mind of the witness for or against the cause of either of the litigants. Expert witnesses are often found to be necessary, and while there is no good reason that any one who has the requisite special knowledge should not give testimony as an expert witness and receive greater compensation therefor than the fee allowed a witness by the statute, if the party calling him voluntarily consents to pay such greater compensation, still the fact that he receives such additional compensation may be very properly shown to the jury for their consideration when determining the weight and value of his testimony, and any fact which tends to show that he has the feelings of a partisan for the cause of one of the litigants or a bias against that of the other may be shown for the like reason.

Imputing to Another Infection with Venereal Disease.—The Supreme Court of Iowa holds, in the case of McDonald vs. Nugent, that to charge another with being afflicted with

venereal disease is slanderous per se (by itself). It says that from an early date in the development of the common law of slander and libel, a charge made by one person that another is infected with a venereal disease has been held to constitute one of the few exceptions to the general rule applicable to oral slander—that, to be actionable per se, the words must impute some crime to the person defamed. Fortunately for the good name of civilized society, legal controversies calling for a consideration of this particular exception are comparatively rare, but its existence has been universally affirmed by courts administering the common law whenever they have had occasion to pass on a record like the one here before the court. The thought on which actions like this are held maintainable is not that the slanderous words impute a crime, but that the charge made, if true, or if generally believed to be true, would necessarily exclude the person thus impugned from the benefits of decent society. A charge of crime, in the ordinary sense of the word, is a mild and harmless imputation, when compared with words which brand a man or woman as a leprous outcast, and it is a healthful doctrine which holds to strict accountability any one who indulges in such injurious reflections on another. Where slanderous words, whether oral or written, are actionable per se, proof of the speaking or publication is all that is required. Malice in such case is presumed, without other evidence.

Fitting Glasses Not the Practice of Medicine.—The Supreme Court of Illinois says that there was nothing in the record of the case of People, for Use of Illinois State Board of Health, vs. Smith, recently before it, from which it could determine just what the complaint against the defendant was; but for the purposes of this decision, let it be assumed, as asserted by counsel, that the charge was a violation of Sections 7 and 8 of the act of 1899, to regulate the practice of medicine in this state—that is, by professing "to treat, operate on or prescribe for any physical ailment or any physical injury to or deformity of another," as provided in said Section 7, and being an itinerant vendor of an appliance for the treatment of diseases or injuries, as prohibited by Section 8. The finding of the Appellate Court was that all he did was to fit spectacles to the eyes of persons of defective vision, and sell them to such persons. By so doing, the Supreme Court goes on to say, he did not treat, operate on or prescribe for any physical ailment or injury or deformity of another, within the meaning of Section 7; nor did he, by advertising himself as an eye expert, and inviting persons afflicted with certain defects of vision to call on him, profess to treat, operate on, or prescribe for any physical ailment or physical injury to or deformity of another, but in the same advertisement stated that he did not give medical or surgical treatment. All that he asserted by the advertisement was that glasses fitted and ground by his method benefited, and had cured, headaches, blurring, itching, and burning of the eyes, etc. The Supreme Court also thinks it clear that he was not, under the facts here found, an itinerant vendor of any drug, nostrum, ointment, or application of any kind intended for the treatment of diseases or injury; nor did he, by writing or printing, or any other method, it says, profess to the public to cure or treat diseases or deformity by any drug, nostrum, or application, within the meaning of Section 8. It would be, it declares, a strained construction of that section to hold that the mere fitting of spectacles to the eyes of a person is an appliance intended for the treatment of diseases or injury to another. This statute is penal in its character, and must be strictly construed. It is a well-known fact that headaches, dizziness, and other similar ailments, often result from defective vision, which may be relieved by the use of spectacles; but it can not be seriously contended that the person who sells such spectacles, or who tests the eyes and fits such glasses, practices medicine or surgery, or professes to cure or treat diseases or deformities thereby. While the statute under consideration is a wise and humane regulation for the protection of the public, and should be rigidly enforced, the construction here contended for could have no other effect than to bring it into disrepute. And the Supreme Court thinks that, on the facts recited in the judgment below, the Appellate Court ruled properly in holding that the evidence did not warrant a conviction.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.

March 9.

1 *Pathology and Surgical Treatment of Pancreatic Diseases. John B. Deaver and George P. Müller.
2 *Occurrence of Diabetic and Non-diabetic Glycosuria in the Same Individual. Heinrich Stern.
3 *Remarks on the Uncinate Group of Fits, and on Severe Subcutaneous Hemorrhage Occurring in Epilepsy. William G. Spiller.
4 Reflex Cardiac Inhibition Resulting from Irritation of the Peripheral Fibers of the Trifacial Nerve and Occurring in the Course of an Operation for Chronic Empyema of the Frontal Sinus. George Fetterolf.
5 *The Ochsner Treatment of Appendicitis Applied After Operation. George S. Brown.
6 *Astigmatic Changes. Julius Pohlman.
7 Society for Experimental Biology and Medicine. William J. Gies.

1. Pancreatic Diseases.—Deaver and Müller's article discusses the subject of pancreatic disease in full, pointing out the necessity of surgical operations in cases of this disorder. In the acute forms the indications for operation are indicated by the pathology of the disease and the history of the cases. The diagnosis is difficult. The symptoms are often ill-defined so that the mortality is often high, and the time for operation is open to considerable question, but early operation rationally conducted is advisable according to Mikulicz. The technic varies with the nature of the condition. If fat necrosis is found on opening the abdomen, it is a symptom of great importance indicating diffusion of the ferment and decides the diagnosis. The bile passages should be carefully explored, especially the common duct, and the intestines and surrounding viscera carefully protected. The pancreas can be reached through the gastrocolic omentum below the stomach; through the gastrohepatic omentum above the stomach; through the transverse mesocolon back of the colon and stomach. The first method is most applicable for the purpose of drainage. It consists in dividing two layers of the peritoneum forming the gastrocolic omentum, raising the stomach and then cutting through the ascending layer of the transverse mesocolon. If the pancreas presents merely a swollen, tense, edematous appearance, without marked pancreatic involvement, an incision should be made in the long axis of the organ, extending its entire length. Drainage to this opening, though uphill, will sufficiently provide for the serous effusion and broken down cellular products. When there is severe peripancreatic involvement or great necrosis of the gland and fat, loin drainage is required after free incision of the pancreas. It is useless to try to dissect out the necrotic foci. The loin incision is made at the left costovertebral angle. Abscess, necrosis and gangrene require the same treatment. If there is stone in the gall bladder, the operation is seriously complicated as the incision is not best located for cholecystostomy, but in such cases removal of the gallstones and the establishment of an external biliary fistula greatly adds to the chances for recovery. If the stone is in the common duct great care will have to be taken to prevent subsequent peritonitis. The surgery of chronic pancreatitis is much more favorable of late years, and the history of the operations is briefly given and the technic treated. The cause of the disease must be removed, if a biliary or pancreatic stone, and temporary or permanent drainage of the bile be provided for. In cysts the operative procedure will depend on the degree of the adhesions surrounding the structures. This makes it difficult unless the cyst is pedunculated, which is rarely the case. Aspiration of cysts should only be performed when the patient is severely ill from diabetes or the effects of pressure. The cysts will always refill and the danger of leakage is great. When practicable the abdomen should be opened by a median incision above the umbilicus and by incising the gastrocolonic omentum or the transverse mesocolon. The cyst contents should be withdrawn with an aspirating needle, and as it is removed the puncture be

closed with one or more hemostats. The cyst wall is then drawn to the wound, sutured to the parietal peritoneum and drained. When it can not be brought to the abdominal wound, a rubber drainage tube should be introduced into the cavity of the cyst and surrounded with careful gauze packing to prevent leakage.

2. **Diabetic and Non-Diabetic Glycosuria.**—Stern points out the characteristics of diabetic and non-diabetic glycosuria and the possibility of their occurring simultaneously, reporting cases. His conclusions are given as follows:

1. The diabetic state may be well established before glucose is excreted by the urine. Diabetic glycosuria is nothing more than the salient feature of the second stage of the diabetic deterioration.
2. Glycosuria is a symptom, an enunciation of manifold other disturbances of ectogenous, as well as of endogenous causation.
3. With the assistance of various discrepant factors we are enabled to differentiate clinically between the diabetic and non-diabetic form of glycosuria.
4. Duplex meliturla is the result of two concurrent or intercurrent affections of dissimilar character, having the one symptom, glycosuria, in common.
5. The recognition of duplex meliturla depends on the alternate prominence of one set of symptoms, including the respective glycosuria.

3. **Epilepsy.**—Spiller quotes from Hughlings Jackson in regard to the occurrence of certain fits which begin in the gustatory localization of the brain for which he has proposed the name "uncinate group," and reports cases. In one case there were also severe submucous hemorrhages in the face and right upper limb, producing decided trouble, which is a rare feature.

5. **Appendicitis.**—Brown believes in Ochsner's method after extirpation of the appendix. In his practice he has found it a valuable resource in the after-treatment.

6. **Astigmatism.**—From a study of 900 cases examined and re-examined, Pohlman found that nearly every third one showed changes in astigmatism; 50 per cent. presented simple increase in the quantity without a change of the axis; 31 per cent. gave merely a change of the axis. These two combined accounted for 81 per cent. of the total. The other 19 per cent. were almost equally divided between 1, increase of astigmatism plus change of axis; 2, change of regular to irregular, and 3, change of irregular to the regular cases. He remarks it would be interesting to know if a similar series of other observers would give like results.

New York Medical Journal.

March 19.

8 Medical Education. Willis G. MacDonald.
9 *The Dangerous (?) Operation of Uterine Curettement. Daniel H. Craig.
10 *Appendicitis in Young Children. John F. Erdmann.
11 *Post-operative Pneumonia, with a Report of a Case. Lawrence E. Holmes.
12 *Inaccuracy of the Common Spoon as a Milk Sugar Measure in the Home Modification of Milk. D. J. M. Miller.
13 Tertiary Syphilis of the Nose and Pharynx. (Concluded.) W. Scott Renner.
14 The Treatment of Paraphimosis. (Concluded.) J. N. Weller, Everett S. Hicks and R. C. Fish.

9. **Uterine Curettement.**—Craig thinks that this operation is not dangerous in the hands of a skilled operator, and that there is too much exaggerated statement as regards the danger of vaginal infection and too much downward traction in operations. He also believes in minimum dilatation without trauma to the cervical tissues. The greatest danger is the perforation of the uterine wall, which he thinks may occur without symptoms. The determination of the exact shape and depth of the uterine cavity should be determined beforehand. With the uterine curette-forceps of Emmet for the fundal and cornual mucosa the need of upward pressure is diminished and the danger of perforation is lessened, and the skilled curetter would know at once what the conditions are. The operator's sense of touch should be constantly on the alert and injury to the intestines in cases of perforation can hardly occur with one of experience. He does not favor the tampon. He thinks it more rational to clean the cavity and leave the blood and exudates to drain through the dilated cervix and wash away the organisms. The postoperative douche should be avoided as a rule for the first forty-eight hours until the cervix has had a chance to contract and there is no danger of transferring anything from the vagina to the uterine cavity. Of course, there may be cases where thorough uterine douching may be required.

10. **Appendicitis in Young Children.**—In 250 cases seen since January, 1902, by Erdmann 29 occurred in children under 10 years of age. All the cases were acute; 22 were operated on with a mortality of 2. The appendix was removed in every instance. The youngest was 3 1/6 years and the oldest 10 years. He has also removed the appendix nine times in infants from four months to eight months of age during the same period. These were intussusception cases and have no special bearing on the question of appendicitis. The diagnosis under 10 years is difficult. Objective signs must be chiefly relied on, and a careful history and study of the cases if necessary. Pneumonia or pleurisy of the type with lower intercostal pain is difficult to exclude the first day or so, but as the pulse becomes very rapid and the face anxious appendicitis may be diagnosed, while accelerated breathing and a livid or flushed face indicate pneumonia. In the very young we must rely on the symptoms of pain manifested by fitful crying and sleep, abdominal tenderness, rigidity of the right lower quadrant after the first few hours, absence of blood and bloody mucus in the stools, high pulse and temperature, the tumor fixed, and in the classical region if the illness is of long duration and at this time a temperature typical of pus. Almost invariably the little patient unconsciously places his hand in the region of the appendix to ward off manipulation. This sign is almost pathognomonic. Erdmann describes at length his method of operation.

11. **Post-Operative Pneumonia.**—After reporting a case, Holmes discusses the general subject and reviews the literature. He thinks it is much more correct to speak of post-operative pneumonia than it is to speak of anesthetic or ether pneumonia, for statistics show that pneumonia was as frequent before the anesthesia period as it is now after operations, and that it occurs also when local anesthesia is utilized for major operations. General anesthesia, therefore, does not materially increase the danger of pneumonia if the lungs are in good shape. Moreover, if there is an increased probability of pneumonia with ether than after chloroform, it is so slight as not to outbalance the greater danger of the latter agent. He advises care in giving the anesthetic, administering it slowly, not too much, keeping the patient warm during the operation and changing the position as soon as possible after it to avoid hypostatic congestion, etc.

12. **The Spoon as a Medicine Measure.**—Miller points out the inaccuracy of the teaspoon or tablespoon for drug measurement, for either solids or liquids, and gives some tests of them with sugar of milk. A teaspoon will hold 50 to 100 grains as it is leveled or piled up, and a tablespoonful may range anywhere from 150 to 215 grains, more or less.

Medical Record, New York.

March 19.

15 *A New Treatment for Fracture of the Neck of the Femur. Royal Whitman.
16 *The Soluble Ferments of Cow's Milk. Joseph Lesperance.
17 *Some Operative Methods for the Fixation of Movable Kidney and Their Result. Alex. B. Johnson.
18 Asthenopia and Headache from Eyestrain. James R. Nelson.
19 *Dilatation of the Bladder in Suprapubic Cystotomy. E. Blasucci.
20 Gastroenterostomy for Carcinoma of the Stomach. W. P. McIntosh.
21 *Primary Pyelitis in Infants. Marcell Hartwig.

15. **New Treatment for Fracture of the Neck of the Femur.**—Whitman advocates the treatment of fracture of the femur by overcoming the deformity by abduction of the limb and fixing by a spica bandage. In case of complete fracture, after overcoming the shortening by traction, the limb should be abducted to utilize the tension on the capsule to direct the outer toward the inner fragment contained within the acetabulum and bring them into more or less accurate apposition. Complete abduction makes the muscle contraction powerless to induce deformity. Fixation is most directly assured by contact of the neck with the rim of the acetabulum and of the trochanter with the side of the pelvis. In this attitude the support of the plaster bandage should provide the rest needed for repair. This method, which was first suggested for fractures in children, is now advocated as a routine measure for all cases of fracture of the neck in which local treatment is to be desired. The details are given as follows:

A piece of ordinary seamless shirting, such as is used for plaster jackets, about six feet in length, cut and sewed in a shape to cover the body and the limb, is first applied and is fixed securely in place by bands passing over the shoulders. This is threaded with several long bandages, the "scratchers," designed to keep the skin in good condition. It is also advisable to insert a substantial "dinner pad." The patient is then anesthetised and is placed in position for the application of the bandage. The head and shoulders may be conveniently supported on a box of proper length and about eight inches in height; the pelvis rests on a sacral support. This is a thin plate of steel about the size of the hand, of a trowel or heart shape, carried on an upright bar fixed to a wide base or screwed to the end of the table. Such a support is almost indispensable, because it does not interfere with the proper application of the posterior surface of the spica, as do the blocks or other supports in common use. A wide, firm band of cloth is then carried about the perineum, the two ends of which united over the shoulder and held by an assistant furnish counter traction. If the fracture is incomplete, as is usual in young subjects, the limb under gentle traction is slowly abducted, an assistant at the same time abducting the sound limb to prevent the tilting upward of the pelvis, and to demonstrate the normal range. If the fracture is complete, the shortening is first entirely overcome by the traction and counter traction. The limb in the extended attitude under traction, is slowly abducted by the assistant until the trochanter is fairly apposed to the side of the pelvis; the operator meanwhile pressing the trochanter downward and inward. In some instances there is a distinct snap as the outer part of the neck slips beneath the rim of the acetabulum, and in any event the abduction is increased until the trochanter is firmly apposed to the side of the pelvis. In the first instance the primary object of the abduction is by leverage against the upper border of the acetabulum to overcome the deformity; in the second, by tension on the capsule to remove folds to oppose the fragments and by actual contact of the bone with bone to oppose redisplacement.

The limb being held in this attitude, the pelvis, the ribs, the bony prominences of the knee and foot are protected with layers of sheet wadding, and the limb and body are then covered in carefully with cotton flannel bandages, which are in themselves a protection against pressure. A plaster spica is then applied, extending preferably from the mammary line to the toes. This should be drawn snugly about the hip, and most important of all, should completely enclose and support the buttocks, not only to provide antero-posterior support, but to prevent the excoriations that are inevitable if the tissues are allowed to hang over the edge of the plaster. The insertion of thin strips of wood or iron about the hip and knee joints of a lighter bandage than would otherwise be possible. When the bandage is completed it is carefully cut away to allow complete flexion of the sound limb, the shirting is drawn over the edges of the bandage, carrying beneath it the cotton, and is sewed preferably to an outer cover of shirting drawn over the bandage. Thus a smooth, even surface next to the body and the skin may be kept in condition by drawing the friction bandages back and forth at intervals. These bandages, popularised by Lorenz, are always placed beneath the body part of the spica and with the exercise of a little ingenuity their use can be extended to the limb also.

For greater precaution it may be advisable to cut openings in the plaster at all points where pressure is feared, and a part may be cut away from the front of the body part if the constriction is too great.

As a rule he finds this support comfortable, and the patient can be moved or even move himself. A long spica is most efficient in preventing rotation of the limb, but a short spica can be used in impacted or incomplete cases. The steps in the application are the same excepting it is more accurately molded about the pelvic crests and the joint, and is made especially thick and strong and then cut away so that a band not more than four to six inches in width remains across the front of the abdomen. The lower end may be carried a little below the knee or cut away to allow free movement of the knee if desirable. A short spica permits the patient to assume a semi-reclining position and if the limb were slightly flexed, he can practically assume a sitting posture. If a long spica is used at the end of four weeks it may be shortened to allow the action of the knee and at the end of eight weeks, if union is assured, it can be removed, followed by massage, passive movement and voluntary motion, but the limb should not be used to support the weight for at least four months. Crutches and a hip brace should be employed. A short plaster spica holding the limb in moderate abduction may be used. Of course, this treatment is adapted to the favorable class, but he thinks it can be used in practically any case with modifications he suggested.

16. The Ferments of Cow's Milk.—The history of the discovery of these bodies in cow's milk is reviewed by Lesperance, who holds that we have definitely determined the presence of trypsin and pepsin, of the lipasic and oxidizing ferments, and of a glycolytic ferment in cow's milk. There is reason to expect still further discoveries in this direction.

17. Kidney Fixation.—The methods of kidney fixation are reviewed by Johnson, who finds that the better methods of nephropexy are ordinarily successful. To select one method as superior to another is impossible. Nearly all those at present in vogue produce in the majority of cases sufficiently firm fixation of the kidney. As for sutures, he believes catgut possesses advantages over all other non-absorbable materials.

19. Dilatation of the Bladder in Cystotomy.—Biasucci discusses the amount of dilatation that the bladder can safely stand in case of operation, and concludes that a careful injection has no dangers. Limited dilatation of the bladder is preferable to none. Anatomical researches in regard to the ascent of the peritoneal fold are of little or no value to the surgeon, and we find in practice more working space than these researches would indicate. There are practically no cases where suprapubic cystotomy is indicated in which dilatation of the bladder can not be carried out. In case of female fistulous bladder and a bladder torn by trauma he would use a collapsible balloon, which should be inflated within the bladder after it is inserted, as devised by Dr. Vetere of Naples. The method of using it is very simple, and it has also the advantage of preventing the effusion of liquid in the suprapubic wound when the bladder is opened.,

21. Primary Pyelitis in Infants.—Hartwig remarks that while there is possibly some mention in the literature of this disease he has not observed it. Postmortem two cases were found to his knowledge, and he thinks the condition is not very rare. Failure to recognize the disorder, which was not known to Ewald when he lectured in Buffalo recently, depends on the fact that nothing but a careful urinary examination reveals it while its general impression is that of typhoid fever. He would urge in all doubtful cases of typhoid fever a careful examination of the urine for primary pyelitis.

Medical News, New York.

March 9.

22 *The Individual Equation of the Patient in Surgical Operations. W. L. Estes.
23 *Valvular Disease of the Heart and Its Treatment. Case of Mitral Obstruction and Insufficiency with Tricuspid Regurgitation and Pulsating Liver. Stephen Smith Burt.
24 *The Clinical Significance of Pain in the Epigastrium. Frank H. Murdoch.
25 *The Significance of Pus and Blood in the Urine. Richard Douglas.
26 Neurasthenia. Hubert Richardson.
27 *Theatrical Profession as a Factor in the Dissemination of Disease. S. H. Brown.
28 Instrument Hanger for Glass-shelved Cases. Frederic Griffith.
29 *Forensic Eye Aspects of Tabes. Jas. G. Kiernan.

22. The Individual Equation of the Patient in Surgical Operations.—Estes points out that the history, environment, habits, personal disposition, age, sex, nativity, physical condition, extent and locality of the operation all have their influence on the result. He thinks it is the surgeon's duty to obtain all the data which will enable him to determine the importance of each of these points in any case he has to operate on. This must be done by obtaining a careful history of the patient, including the family history, and by a thorough physical examination, calling to his aid the laboratory, and he should also include a urinary examination in the personal physical observation. He thinks it is more difficult to determine when not to operate than it is when to operate, and far more important in many instances.

23. Valvular Disease of the Heart.—From the study of the conditions of valvular disease illustrated by the report of a case, Burt summarizes as follows:

Judicious treatment of a patient with valvular disease of the heart presupposes a knowledge of the distinction, and an ability to discriminate clinically, between adequate and inadequate compensation; possibility is one thing, probability is another, and finality quite another in the prognosis of these affections; although not always feasible, it is nevertheless desirable frankly to explain the situation, where dilatation from valvular defects is balanced by hypertrophy, in order to forestall a fortuitous disturbance of equilibrium; ordinary occupations and recreations not too strenuous need not necessarily be abandoned; systematic outdoor exercise, preferably walking, is not only permissible, but, to maintain the integrity of the heart muscles, actually indispensable; violent exertion, exciting emotions and excessive eating and drinking are positively injurious; temperateness in all things pertaining to daily existence should be the watchword; with failing compensation absolute rest is of paramount importance, and, not infrequently, all that is necessary for rehabilitation; digitalis in this condition irrespective of the valve affected when drugs are required is the sole remedy that can not be dispensed with; large doses may be given for a short time and small doses for a long time or indefinitely; strophanthus is one of the most reliable substitutes for digitalis; nitroglycerin, calomel, acoalite, iron, arsenic, magnesium sulphate and strychnin are valuable adjuvants; maximum doses of strychnin should not be continued for extended

periods without intermission; finally, ruptured compensation in the beginning of the end, however long deferred by intelligent management.

24. **Epigastric Pain.**—Murdoch points out the various conditions which may produce epigastric pain and their symptoms, reporting cases.

25. **Pus and Blood in the Urine.**—Douglas' article is a general statement of the conditions in which pus and blood may occur, and differentiation of the locality and form of the disease.

27. **The Theatrical Profession as a Disseminator of Disease.**—Brown concludes from his observation and studies that the theatrical profession is a factor of some importance in the dissemination of scabies, pediculosis, syphilis and gonorrhea by reason of its peculiar sociologic position. This influence is greater in the traveling troupes than in stock companies on account of the lack of accommodations and unhygienic conditions endured, and the living apart from the rest of the world. Moreover this class lack the proper medical information which might aid them, and the lack of time prevents them from consulting a medical man in the large cities excepting when physically incapacitated. They, therefore, fall into the hands of unscrupulous and ignorant quacks. This applies, of course, to the poorer class of actors, as successful actors are not included in this category. He thinks the remedy is not exactly clear. While the effects of the parasitic diseases mentioned are not dangerous, they are annoying, and should be prevented. Facilities for frequent bathing should be provided, and accommodations at the theaters should be such that the lesser lights can properly care for themselves. The manner in which the costumes are handled can not be too harshly condemned. With the resurrection of old costumes for a revival of any kind, it is scarcely less than miraculous that all the diseases known to man are not equally distributed throughout the company. The sterilization of these costumes at least once would do no material harm, and would greatly aid in preventing disease. It does not, however, necessarily follow that because an individual is on the stage that he is entitled to all these diseases or specially subject to them.

29. **The Eye Aspects of Tabes.**—Kiernan points out that the Argyll-Robertson pupil exceptionally occurs in many other conditions than tabes. It may occur in alcoholism as well as in parasyphilitic disorders. Its frequency in constitutional syphilis is over-rated.

Boston Medical and Surgical Journal.

March 3.

30 *The Relation of Some Special Causes to the Development of Neurasthenia. Robert T. Edes.
31 *Intra-abdominal Rupture of Ovarian Cysts. With Report of a Case. Ernest B. Young.

30. **Neurasthenia.**—Edes reviews the various causes of neurasthenia and doubts the frequent effect of overwork, but admits that it is possible. He quotes the instance of James Russell Lowell when preparing the "Commemoration Ode," and remarks that it was not neurasthenia, though he was some weeks in getting over the effects of the work. Moreover, if a lesser man had his bread to earn by performing a similar task every week and was aware that he was not doing it well, he would need but little outside pressure to bring him dangerously near the line. Then if, according to Stiller, he were pale and lean, and his tenth rib were not united by cartilage to the sternum, or if, according to Glénard, his abdominal viscera were not firmly fixed in their places, or if, according to Bartholow and many others, he were to try to indulge in that ease and luxury which are not very likely to come to a man in his position, or if he tried to brighten himself up with alcohol, tobacco or cocain, or if, according to the Austrians and French, he appealed to Venus rather than to Bacchus for relief, or if, according to Stevens and Ranney, he could not easily converge his eyes on his paper, or, according to Gould, could not focus them in their different diameters alike, he would surely cross the line. If he had done or suffered all or several of these things it would depend on the physician into whose hands he fell to say which of them was responsible and whether he should get good advice, etc., have new spectacles or get his eye muscles cut or get baths, calomel, etc., and go off a well man. Edes is in doubt as to the effect of many of these causes, and would not put full faith in them singly. He likewise considers lithemia as insufficient. He concludes his paper with a gentle criticism of Gould's recent utterances in regard to eye-strain as a cause. He considers that the unquestioning acceptance of any one of these factors or its overwhelming prominence in the mind of the practitioner, tends to relieve him of the responsibility of making the decision as to which is operative in the case before him, but his knowledge of the possible presence of any one or any two or three of them places it on him rather than on the specialist. It is too much to ask of any man that he should be familiar with the details of all the specialties, but he should be able to follow the more important signs far enough to decide when to call in his brothers, whose knowledge is more restricted and consequently more precise, and whose treatment can be more accurately adapted to each individual patient.

31. **Rupture of Ovarian Cysts.**—Young begins with a résumé of the literature and then reports a case, following it with a general discussion of the symptoms, treatment, prognosis, etc. He believes that early operative treatment is indicated according to the general consensus of opinion. The statistics of the mortality certainly bear out this idea.

Cincinnati Lancet-Clinic.

March 5.

32 *Treatment of Retrodeviations of the Uterus. Magnus A. Tate.
33 Smallpox—the Importance of its Early Diagnosis. T. J. Shoemaker.
34 Home Treatment of Anomalies of the Ocular Muscles. Derrick T. Vail.
35 Physiologic and Psychologic Impotency. W. P. Ford.

32. **Retrodeviations of the Uterus.**—Tate finds that the theory that the perineal body has anything to do with keeping the uterus in its natural position has now very few adherents, but he thinks it is of some importance. There is no normal position of the uterus. The influences of the subject's position, fullness or emptiness of the bladder, etc., all have their effect in changing its position. The non-surgical treatment of misplacements depends mainly, in his opinion, on the general health of the patient, whether an actual cure of the retrodeviation is obtained or not. Pessaries are defective and may produce trouble, and massage has been tried and found wanting. Electricity, he thinks, has probably done more harm than good in these cases. Pregnancy may or may not be the means of curing the displacement, but certainly many cases have been benefited. Surgical treatment is necessary where complications exist. If there is a pelvis full of adhesions there is no use doing any mere tinkering; above all, do not practice massage. From his own experience he advises the Gilliam and Kelly methods. For uncomplicated retrodeviated uterus in young or middle-aged women he prefers Gilliam's method, the steps of which he describes. If the case is one after the menopause he always makes fixation after Olshausen's method, as modified by Kelly, but carrying his ligature through not only the peritoneum, uterus to peritoneum consecutively, but fascia as well. This gives a firm anchorage and holds the uterus very securely. Vaginal operations seem to him unsatisfactory.

St. Louis Medical Review.

March 5.

36 Congenital Hypertrophy of the Lower Extremity. H. W. Jones.
37 My Autobiography and Reminiscences. (Continued.) S. Pollak.

Journal of Nervous and Mental Disease, New York.

March.

38 *Is Epilepsy a Functional Disease? M. Allen Starr.
39 A Cerebellar Tumor; Operation; Recovery. Frank R. Fry.
40 *Delirium Grave. A Critical Study, with Report of a Case with Autopsy. William B. Pritchard.
41 *Paralysis Agitans; Some Clinical Observations Based on the Study of 219 Cases Seen at the Clinic of Professor M. Allen Starr. T. Stuart Hart.

38. **Epilepsy.**—From the analysis of symptoms, causes, etc., Starr concludes that an epileptic attack is a symptom of a more general disease. The disease is a disorder of control over inherent energy, and its existence is proof of a weak or defective organization of the brain. Any lesion, no matter where or what, may interfere with control and give rise to the symp-

tom. He thinks in view of these facts it is better to say that epilepsy is an organic disease of the brain characterized by lack of control over the mechanism of motor energy.

40. **Delirium Grave.**—Pritchard has studied this condition, and thinks it is a distinct psychosis which is very inadequately treated of in most text-books. The best clinical description of the disease is that given by Spitzka. A case is reported in detail. Treatment seems to be comparatively ineffective.

41. **Paralysis Agitans.**—Hart analyzes the cases of this disorder observed in Dr. Allen Starr's clinic. He found that it occurs twice as frequently among men as women; rarely before the thirtieth year. It is not especially a disease of old age, but rather of the pre-senile period. A direct heredity could rarely be found, but there is a considerable proportion of cases with nervous heredity. In only 16 per cent. of the 219 analyzed had any of the relatives been similarly affected. Among the chief causal factors are emotion and traumatism. In 12 of the cases previous infectious disease was reported and associated with the nervous disorder. He thinks we are far from solving the real etiology of the affection, but all the factors that have been suggested have a common general weakening influence on the organism and particularly on the nervous system. Tremor is the first symptom noticed by most patients. Rigidity was observed in 142 cases; contractures were noticed in 28, and a tendency to fall was observed in 173 cases. The deep reflexes were increased in 188; 90 were normal; in 30 they were diminished; and in 68 they were exaggerated. The Argyll-Robertson pupil was present in 2 and voice changes were noticed in 120 cases. Pain when present was, as a rule, not severe. Paresthesias of various kinds were present in 120 cases and hyperidrosis and restlessness were also not uncommon accompaniments. The pulse rate was above 100 in 30 and various complications were observed; they seemed to be coincident affections. Two cases complicated by hemiplegia are described in brief detail. No cures are reported, but in a number of cases there seemed to be an arrest of the disease. The treatment consisted mainly in removing the sources of anxiety and worry, relief from exhaustive and laborious occupation, attempts to improve the general nutrition, the use of moderate exercise, the systematic use of massage and hydrotherapy. In a number of cases electricity was used, but with no noticeable effect. None of the drugs recommended proved regularly beneficial. Those of most value were hydrobromate of hyoscin and sulphate of duboisine. These appeared to diminish the tremor and relieve the insomnia for the time. General tonics such as iron and strychnin were of value.

Brooklyn Medical Journal.
March.

42 *A Study of the Climate of Long Island. William H. Ross.
43 Treatment of Fractures. James P. Warbasse.
44 *Injury as an Alleged Cause of Certain Nervous Diseases. C. P. Gildersleeve.
45 Granular Lids. B. C. Collins.
46 Bradley Parker, M.D. William Schroeder.

42. **The Climate of Long Island.**—Though Long Island is one of the oldest settled parts of the United States, Ross remarks that its healthfulness is little appreciated by the medical profession. It is thought to abound in marshes, malaria and mosquitoes, but practically the opposite is true. It is approximately 15 miles wide and 120 long, with 250 miles of water front, counting its bays. It is the only considerable part of the Atlantic coast entirely surrounded by water. Its geographical formation is glacial. The island is mainly made up of sand and gravel and fine strata of clay, dipping from north to south. The ground water flows from north to south and the character of the soil modifies the climate. There is less fog than in any other section where clay land abounds more, and the water is excellent. The mean summer temperature is 70, and the mean winter 30; the mean annual temperature is 51.8. The annual range is 39 degrees, as compared with 64 to 70 and more for the whole country. The relative humidity is low, especially in the pine region. The average number of clear days is 70 more than New York City, 90 more than Nantucket and 120 more than the western part of the state. The eastern part of the island has only 12 days less sunshine than Denver and 30 less than Phoenix, Ariz. The wind direction in the summer is from the south and southwest off the Atlantic ocean, and in the winter the prevailing wind is from the northwest, producing a continental type of climate, but there are considerable periods when the wind is from the southwest and the tempering effect of the ocean is again felt. The pine forests of the island occupy the portion between the central range of hills and the south shore, six to eight miles in width, and extend for sixty miles. There is no evergreen forest in the state of New York of equal size other than the Adirondacks. Evergreen forests have a powerful purifying effect on the atmosphere, rendering it antiseptic, and, with the aseptic ocean air, which for more than six months of the year is carried through the district, the sandy soil, relatively low humidity, and large amount of sunshine, Long Island presents climatic features in its pine forest region not surpassed by any place along the Atlantic coast. Of the 3,935 deaths in 1885-6-7 of persons over twenty years of age, 1,394 were between 70 and 90 years, 642 between 80 and 100 years, 111 between 90 and 100, and 4 over 100. This is a remarkable showing, which Ross thinks is hardly equaled anywhere in the country. He thinks the climate is especially favorable for the convalescent from acute diseases, in surgical diseases to accelerate tissue change, where an equable temperature is desired, for pulmonary tuberculosis, neurasthenia, nerve exhaustion and other nervous troubles and insomnia. Tuberculosis is one of the rarest diseases among the natives and rheumatism is scarcely more frequent. Malaria does not exist except at some sections at the western end.

44. **Injury as a Cause of Nervous Diseases.**—Gildersleeve discusses the severe nervous disorders which are sometimes attributed to trauma, such as multiple sclerosis, though there is very little evidence of this condition being primarily caused by trauma. Similarly with locomotor ataxia. Trauma may be the exciting cause in a syphilitic subject, but as to its being the primary cause, he questions it. He doubts also whether it can be secondary to injury of the peripheral nerves, causing an ascending neuritis, as has been held by some others. Paralysis agitans is another disorder which is frequently ascribed to trauma. He has no doubt that certain injuries are perfectly competent to cause that disease. Neurasthenia and hysteria are also disorders that can be due to trauma, and are serious enough to be entitled to recognition by the surgeon as actual morbid entities.

Colorado Medicine, Denver.
March.

47 Cancer of the Rectum. Combined Abdominal and Perineal Operation. Charles A. Powers.
48 *Report of a Case of Congenital Dilatation of the Colon; Operation; Recovery. C. K. Fleming.
49 Diagnosis of Gastric Ulcer. M. Kleiner.
50 The Medical Treatment of Gastric Ulcer. E. F. Hershey.
51 Surgical Treatment of Ulcer of the Stomach. Edmund J. A. Rogers.
52 Etiology and Diagnosis of Dilatation of the Stomach and Gastroptosis. J. E. Kinney.
53 Medical Treatment of Dilatation of the Stomach and Gastroptosis. W. T. Little.
54 Significance of Epigastric Pain and Tenderness. J. N. Hall.
55 Influence on the Stomach of Certain Diseases Elsewhere in the Body. F. G. Ryles.
56 Influence of Diseases of the Stomach on the Nervous System. S. D. Hopkins.
57 Diseases of the Stomach in Connection with the Eyes. George F. Libby.
58 Carcinoma of the Stomach—Early Diagnosis. C. D. Spivak.
59 Carcinoma of the Stomach, Palliative Medical Treatment. W. A. Campbell.
60 Carcinoma of the Stomach—Surgical Treatment. C. A. Powers.
61 Significance of Vomiting in Diseases of the Stomach. George A. Moleen.

48. **Colon Dilatation.**—The patient operated on by Fleming, a man 25 years of age with good general history, had suffered nearly all his life from lack of proper defecation and consequent deformity of the abdomen. All sorts of cures and drugs were tried without good results. The operation was by laparotomy and the dilatation of the colon, which resembled an ovarian cyst, extended from about three inches from below the splenic flexure to the anus, and in the illustration apparently occupied nearly the whole lower portion of the abdomen with its sac-like distention. The removal of the sac was considered feasible, owing to the long mesocolon, but too dangerous, and the formation of an artificial anus was not desirable. Plica-

tion of the sac was deemed the least dangerous procedure. The operation consisted in plaiting the sac longitudinally from one extremity to the other. Seven or eight folds were taken altogether, being held by continuous chromic catgut sutures, which not only included the peritoneum, but also some of the thickened wall. After the folds were completed the sac was reduced in size to about four inches in diameter. Through fear of kinking it was suspended at its upper extremity by a catgut suture to the abdominal wall. The abdomen was then closed. The patient left the hospital in four weeks, notwithstanding an attack of catarrhal pneumonia which occurred after the operation. The bowels were regularly moved by enemas and selected diet used. He was greatly improved and his bowels moved with cathartics and enemas, which was not the case before the operation, and not infrequently spontaneous movements have occurred. Fleming remarks that he is not aware of a previous operation of this kind for this purpose, though a similar one has been used in cases of dilated stomach.

International Journal of Surgery, New York.

March.

62 Gonorrheal Inflammation of Joints. A. E. Halstead.
63 Decapsulation of the Kidney for Chronic Bright's Disease. George Goodfellow and D. L. Eaton.
64 Why the Prevailing Sterility of American Marriages? Geo. J. Engelmann.
65 *A New Device and Method for Intestinal Anastomosis. W. P. Carr.
66 Reformation of the Cervical Canal After Atresia Lasting Two Years. A. E. Payne.
67 The Surgical Assistant (operations in and about the vagina). Walter M. Brickner.

65. Intestinal Anastomosis.—The device here recommended by Carr is the use of small silver clamps compressing the inverted edges of the two portions of the bowel. The space where the last one is introduced is closed by Lembert sutures. The article is illustrated. He thinks the method has none of the objectionable features of the Murphy button, is easy of application in most cases, is applicable to any kind of intestinal or gastrointestinal union and to any sized intestine or wound. In the one case where he employed it, most of the clamps were recovered between the sixteenth and twenty-first days.

Journal of the Michigan State Medical Society, Detroit.

March.

68 *The Lacerated Cervix Uteri: Amputation or Trachelorrhaphy —Which? H. Wellington Yates.
69 The Worth, Necessity and Duty of Medical Organization. J. M. Elliott.
70 *Intratracheal Injections: Experimental and Clinical Study of Their Value in Diseases of the Lungs. Willis S. Anderson.
71 Professional Courtesy. F. S. Root.
72 Recent Progress in Laryngology. Wadsworth Warren.
73 Epilepsy as Viewed from the Standpoint of the Sufferer.

68. Cervical Lacerations.—The relative value of trachelorrhaphy or amputation in cases of cervical laceration is treated of by Yates, who thinks that the Emmet operation is unfitted for conditions of great hypertrophy and hyperplasia, or where the greater part of the cervix is composed of scar tissue. The operation, which he considers most satisfactory in such cases, is that devised by Newman, published in THE JOURNAL of April 21, 1901, and which he here fully illustrates. The Emmet operation is one of choice only where there is little adventitious tissue and the pathologic conditions are both recent and simple.

70. Intratracheal Injections.—Anderson advocates the use of intratracheal injections in lung diseases and gives the results of experiments performed on dogs to show the absorbability of medicaments thus introduced. The best vehicle he finds is pure olive oil and he claims that the clinical use of intratracheal injections is feasible. Thousands of such have been given without injury and in most cases with great benefit. The advantages of olive oil are that it is a solvent for most of the drugs that need be used, and the claim that it is not absorbed is not borne out by his experiments nor by large clinical experience. The drugs used should be non-irritating, freely soluble and not be employed in poisonous doses. He finds that such drugs as guaiacol, camphor, menthol, iodoform, iodin and some of the essential oils are most useful. Most of his patients were given a combination of camphor, menthol, guaiacol and eucalyptus. The solution should be warmed to body temperature before the injection is made. Two illustrative cases are reported.

Ft. Wayne Medical Journal-Magazine.

February.

74 Notes on X-ray Treatment with Special References to Scirrhus Cancer of Breast. N. L. Deming.

Ophthalmic Record, Chicago.

February.

75 A Shade to Protect the Examiner's Eyes from the Bright Light When Working with the Source of Light Close to the Mirror in Photoscopy (Retinoscopy). Mark D. Stevenson.
76 Case of Acute Toxic Amblyopia from Methyl Alcohol. William E. Bruner.
77 A New Cataract Knife. Melville Black.
78 Effect of Neurasthenia on the Eyes. S. B. Muncaster.
79 Ulcus Corneæ Serpens. L. D. Bross.
80 An Improved Eye Irrigator. Frank C. Todd.
81 *Simple Operation for Entropium. Report of a Case. J. H. James.
82 An Ophthalmodynamometer. C. A. Wishart.
83 The Angle Gamma and Its Relation to Strabismus. Frank E. Brawley.

81. Entropium.—James has operated by the method described to him by Dr. Frank Allport as follows:

Stretching the skin of the lid as much as possible from the border upward, three or four sutures are placed in it in this manner: Pass the needle with a strong silk suture directly through the lid at or near the upper border of the cartilage, being careful to engage the cartilage with it and then pass it back again, leaving a space of from three-eighths to one-quarter of an inch between them, and tie firmly. Three of these were so placed, one in the middle of the lids and one each side half way between the first and the inner and outer canthus. These sutures were left in one week, when they were removed. By this means cicatricial adhesions are formed between the skin and the upper border of the cartilage, thus permanently everting the lid border. The operation is quickly done, and has in the past served me satisfactorily in mild cases where only a few hairs were the aggressors; but I have never before attempted it, where there was complete entropium of both lids, and where all the lashes were resting on the cornea, as in this case, and much to my surprise and delight, the result seems at this time to be as nearly perfect as it could be.

He finds this operation in mild cases extremely satisfactory and the results as good as other operations with better cosmetic effects.

Alienist and Neurologist, St. Louis.

February.

84 *Mixoscopic Adolescent Survivals in Art, Literature and Pseudo-ethics. James G. Kiernan.
85 *The Life and Health of Our Girls in Relation to Their Future. James H. McBride.
86 *Outlines of Psychiatry in Clinical Lectures. (To be continued.) C. Wernicke.
87 *Medical Science, the Medical Profession, the State and the People. Charles H. Hughes.
88 The Gentleman Degenerate.

84. Mixoscopic Adolescent Survivals.—Kiernan's article is continued. This installment is especially devoted to certain phases of Rousseau's career as an illustration of the conditions described.

85.—See abstract in THE JOURNAL, xl, p. 1527.

86. Clinical Lectures in Psychiatry.—The subject of Wernicke's twenty-seventh lecture is chronic and protracted alcoholic delirium, the polyneuritis psychoses, and presbyophrenia or senile insanity. It terminates with the description of a case of a peculiar form of what he calls acute allopsychosis or marked hallucinatory insanity with motor restlessness and confusion, inability to recognize surrounding objects and illusions of location, etc. The lecture is to be continued.

87. The Medical Profession and the State.—Hughes' memorial address goes over the progress of medicine in detail, calling especial attention to the public duties of the physician. He says there was never a time when great and capable medical men were as much needed as now by the state. The people must learn what the medical profession knows and legislation should be directed for public health and public physical welfare. The more medical men who go into public service the better for the people.

New Orleans Medical and Surgical Journal.

March.

89 *Notes and Observations on Uncinariasis in Porto Rico. (To be continued.) Bailey K. Ashford and W. W. King.
90 Croupous Pneumonia; Its Prevalence and Treatment. Adrian A. Landry.
91 *Normal Salt Solution and Butter as Stimulant and Nourishment, Subcutaneously and Cutaneously Administered, in "Swamp," Enteric and Scarlet Fevers. S. L. Williams.

89. Uncinariasis.—The history of uncinariasis and an account of its prevalence in Porto Rico are given by Ashford, who speaks very highly of the work done by the Tricoche Hospital at Ponce. The trouble in Porto Rico is that the laborer defiles the soil and infects himself and his children. The remedy is in the establishment of latrines and the systematic enforcement of their use, public education as to cleanliness, the wearing of shoes, etc.

91. Salt Solution and Butter as Stimulant and Nourishment.—The title of Williams' article explains the subject, but the account of his experiences with the remedies is of interest. He reports cases where life has been apparently saved after every other means had failed by subcutaneous injections of salt solution and inunctions of butter cutaneously. His experience impresses him with the great absorption through the lymph capillary system and the helpfulness of keeping the skin epithelium nourished, especially in diseases where the high stages of hyperemia and the desquamation react on the nervous system. His plan in using salt solution is to insert two ordinary hypodermic needles, externally, below the hip-joint and alternately fill and slowly force syringeful after syringeful, according to the demands, using gentle massage after these injections until the results are obtained or abandoned as hopeless. With butter there is but one simple means of applying it; spreading it over and rubbing it in where the skin is thin, or all over the body when there is fever or nervous excitement.

Illinois Medical Journal, Springfield.
March.

92 *Spermaturia. Arthur R. Elliott.
93 *Normal Salt Solution in Surgery. F. E. Wallace.
94 *Prostatectomy, Its Indications and Technic. G. Frank Lydston.
95 Remarks on Syphilis of the Nervous System. Hugh T. Patrick.
96 The Circulation in the Labyrinth of the Ear. George E. Shambaugh.
97 *Clinical Observations on Arteriosclerosis. Charles A. Elliott.
98 *Examination of the Urine and Segregated Urines as a Means of Diagnosis in Surgical Diseases of the Kidney. M. L. Harris.
99 Report of Ten Autopsies of Cases, the Cause of Death Being Lesions of the Abdominal Viscera. F. L. Markley.
100 Case of Combined Cord Degeneration with Pernicious Anemia. Julius Grinker.

92. Spermaturia.—Elliott notices the conditions that cause a morbid loss of semen, calling attention to the fact that such may produce transient albuminuria. There may be a physiologic presence of seminal elements in the urine, as after sexual excitement or coitus, but there are numerous pathologic conditions, such as chronic inflammation of the prostatic urethra and ejaculatory ducts, together with dilatation and atony of the same usually following gonorrhea and urethral stricture, vesical prostatitis, habitual catheterism, hemorrhoids and venous excesses or masturbation, when spermaturia may be found in the urine almost constantly. Tabes dorsalis and traumatic lesions of the spine and myelitis have also been accompanied by it, and it has been observed in hysteric neurasthenia and in cases of spinal neurasthenia during violent exercise. The urine voided during or after epileptic seizures is found pretty constantly to contain seminal elements. He notices particularly the clinical tests where albumin reaction is obtained, such as Heller's test, where there is a faint reaction rather less than with heat and nitric acid. The potassium ferrocyanid test gives a distinct reaction which is not affected by heat, though it does not develop so quickly as with ordinary urine albumin. The potassio-mercuric-iodid and picric acid tests give plain reactions, which are partially dissolved by heat, to reappear again when the solution becomes cold. The addition of strong acetic acid to the diluted urine yields the mucin reaction, as does also Almen's tannin test used in conjunction with saturated salt solution. In short, the reactions produced by the presence of seminal elements in the urine very closely resemble those produced by serum albumin and may easily cause confusion.

93. Salt Solution in Surgery, Etc.—Wallace notices the conditions in which he has found good results follow the use of salt solution, in enemas one to three times a day, such as in typhoid fever, summer diarrhea, abortion, premature birth, appendicitis, alcoholism, abdominal operations, shock, scantiness of urine, acute peritonitis, etc.

94. Prostatectomy.—Lydston believes that prostatic overgrowth in any case warrants the consideration of the radical operation. He classifies the cases into those beyond middle life where the bladder and kidneys are yet normal; the same complicated by septic vesical inflammation or by secondary renal disturbance; patients from 55 to 65 in whom no secondary conditions have yet occurred; the same cases where catheter life has been established and infection of the bladder has occurred and the kidney has been infected; patients above 65 with sound bladder and kidneys and those where these organs are involved; cases in very advanced life in which the patient is suffering, and more or less secondary involvement of the urinary organs exists, and lastly, cases in apparently young subjects with sound bladder and kidneys. These should be operated irrespective of the severity of the symptoms. The only exception is where the symptoms are slight and the enlargement is simply of a hyperplasic nature, and the progress of the disease can be checked by other measures. In young subjects with more or less secondary renal disturbance, with or without vesical sepsis, operation after proper preparation offers a favorable prognosis unless secondary renal disturbance is very marked. The mortality, he thinks, increases with age. Patients above 75 years of age, however, where vesical and prostatic symptoms have become manifest, should be offered the benefit of palliative measures. In a general way patients with sound bladder and kidneys from 65 to 75 years of age afford very favorable prognosis, provided the perineal operation is practicable. In very old patients with severe vesical and kidney involvement radical operations are usually contra-indicated. The fact that these are the cases that have been usually operated on explains the discouraging results that have been observed. He remarks that prostatectomy of any variety is a misnomer. We only shell out the bulk of the tissue comprising the tumor and a certain amount of secondary inflammatory intra- and extra-capsular tissue is left behind, and nature takes care of it. Total prostatectomy is not practicable within limits of safety, and is unnecessary. Lydston's practice is to operate through the perineum if practicable, but under certain circumstances, the combined or suprapubic operation is often imperative. He illustrates the retractor, which he has found satisfactory, and gives the details of the operation, using the inverted Y-shaped incision and blunt dissection along the urethra to the apex of the prostate. Where the urethra can be drained he endeavors to do so unless the condition of the bladder is such as requires drainage; and even then a retained catheter may sometimes be used. Where the tumors are polypoid or situated very high up and are distinctly intravesical, the combined suprapubic and perineal operation may be required. He distends the bladder with either sterile water or weak antiseptic solutions, after thorough antiseptic irrigation. The question of air vs. fluid distention is a matter of taste. For drainage he prefers a large rigid tube, though in some cases he has used a large rubber tube. The duration of the drainage should be governed by the condition of the bladder.

97. Arteriosclerosis.—Elliott considers that the lesions are toxemic in character. The arterial thickening is a conservative process and not the cause of the disease. The symptoms are generally those of high arterial tension. He speaks of the value of the second aortic sound as a diagnostic sign. As far as treatment is concerned much can be done. The idea is first the early elimination of the toxemia and the reduction of the blood pressure. The habits of life should be thoroughly overhauled, the diet regulated and hygienic conditions generally made most favorable for normal metabolism. Overwork and mental exertion should be avoided. Medical treatment should be directed to reducing the blood pressure, and for this purpose nitroglycerin and the iodids appear to be of the greatest value. While the outlook is unfavorable much can often be done toward arresting the progress of the disease.

98. Surgical Kidney.—Harris emphasizes the importance of examining the urine from each kidney separately, and says

that with his segregator he has obtained in suitable cases very gratifying and reliable results.

California State Journal of Medicine, San Francisco.

March.

101 A Visit to Naha Hospital. J. H. Guthrie.
102 Necessity for the Systematic Annual Examination of School Children's Eyes, Ears, Noses and Throats by School Teachers, Including a Reply to Professor Leslie's Leaflet. (Concluded.) Frank Allport.
103 Grawitz Tumor of Kidney. E. O. Jellinek.
104 Case of Chronic Suppurative Disease of Both Frontal Sinuses —of Both Maxillary Antra—the Ethmoid Cells on the Right Side of the Sphenoidal Antrum—with Demonstration of Pathologic Specimens. Redmond Payne.
105 Observations on the Prostate Gland in its Relation to Gonorrhea. Martin Kretzmyer.
106 Contracture of the Vesical Neck. E. L. Rigdon.
107 Gastric Ulcer. E. C. Dunn.
108 Laparotomy—Report of an Operation. W. B. Cunnane.

Columbus Medical Journal.

February.

109 Difficulties in Enforcing Quarantine in Diphtheria and Scarlet Fever. McKendree C. Smith.
110 Treatment of Contagious Diseases. J. W. Clemmer.
111 Board of Health Records. D. H. Hoover.
112 Professional Prevarication. Harry A. March.

Bulletin of the Kentucky State Medical Association, Louisville.

March.

113 Should I, the General Practitioner, Operate? C. H. Vaught.
114 Etiology of Acute and Chronic Cystitis. C. B. Vanarsdall.
115 Diabetes Mellitus. J. A. Flexner.

Merck's Archives, New York.

March.

116 The Development of Our Knowledge of Ergot. J. M. French.
117 An Index of Diseases Alphabetically Arranged with Their Modern Treatment. (Continued.) G. Björkman.
118 The Drug Treatment of Pulmonary Tuberculosis. (Continued.) H. E. Stroud.

Medical Bulletin, Philadelphia.

March.

119 Mitral Disease. John V. Shoemaker.
120 Pediatric Clinic at the Philadelphia Hospital. W. C. Holloopeter.
121 Tuberculous Disease of the Knee-joint. J. P. Mann.
122 Therapeutics of Glycogen. J. De Nittis.

Denver Medical Times.

March.

123 Unilateral Hematuria from Chronic Interstitial Nephritis; Decapsulation of Kidney; Recovery. Leonard Freeman.
124 Notes on Physiologic Chemistry. Edward C. Hill.
125 Absence of the Vagina—Report of a Case; with Description of an Operation for Constructing One Artificially. C. K. Fleming.

Occidental Medical Times, San Francisco.

March.

126 Homo Delinquens. (Concluded.) Knud Pontoppidan.
127 A Mass of Paraffin in the Bladder and Its Removal. Harry M. Sherman.
128 Case of Aphasia. M. E. Rumwell.
129 The Finsen Ray. D. Friedlander.

Medical Examiner and Practitioner, New York.

March.

130 Some Suggestions Regarding the Form of the Medical Examiner's Report. A. C. McClanahan.
131 Rise of Blood-pressure in Later Life. T. Clifford Allbutt.
132 Mutual Responsibility. W. D. Wyman.
133 Neurasthenia: the Wear and Tear of Life. Guthrie Rankin.
134 A Case of Life Insurance. Its Medicolegal Aspects Presenting Also the Question of the Relation of Pleurisy to Tuberculosis. Francis W. Goss.

Kansas City Medical Index-Lancet.

March.

135 Poliomyelitis Anterior Acuta. F. W. Langdon.
136 Gastric Ulcer. Clinical, Pathologic and Surgical Phases Of. A. H. Cordier.
137 Typhoid Gangrene of the Lower Extremities; 134 Cases—Spontaneous and Surgical Amputation. B. Merrill Ricketts.
138 Medical Affairs of Cass County (Mo.). J. S. Triplett.
139 Therapeutics of Some of the More Recent Electrical Currents. J. N. Scott.

Medical Mirror, St. Louis.

February.

140 Recent Physical Methods in the Treatment of Skin Diseases and Cancer. Charles W. Allen.
141 How Shall We Treat Appendicitis? A. T. Conley.
142 Organic Iron Medication in Secondary Anemias—A Clinical and Hematologic Study. Lino S. Chibas and G. A. De Santos Saxe.
143 Quarantine. P. C. Kallock.

Medical Fortnightly, St. Louis.

February 25.

144 Sleeplessness. John W. Colbert.
145 Case of Exophthalmic Goiter. J. W. Newcomer.
146 Influence of Emotions Causing Acute Glaucoma. W. Nobbe.
147 Autopsy Findings in a Case of Abdominal Pulsation Presented to the Society for Diagnosis, May 21, 1903. Walter C. G. Kirchner.

Journal of Advanced Therapeutics, New York.

March.

148 Plea for Electro-therapeutics Proper. (To be continued.) W. J. Herdman.
149 *Present Status of X-ray Therapy in the Management of Cancer. Clarence E. Skinner.
150 Lobar Pneumonia a Secondary Disease, Preventable and Controllable by Physical and Dietetic Methods. (Continued.) Morris W. Brinkmann.
151 A New System of High Frequency Therapeutics. Frederick F. Strong.
152 Physio-pathologic Action of High-frequency and High-tension Currents on the Normal Skin. Histologic Researches. G. Arienzo and S. Fabrozzi.

149.—See abstract in THE JOURNAL, xli, p. 978.

Kansas City Medical Record.

February.

153 The Treatment of Rectal Strictures. E. H. Thrailkill.
154 Septic Fever. Henry C. Jarvis.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

March 12.

1 *Extensive Carcinoma of the Esophagus, with Unusual Nervous Complications. Robert Saundby and John T. Hewetson.
2 Case of Syphilitic Convulsions Preceded by Marked Somnolence of Long Duration. William B. Bennett.
3 Bilateral Neuritis of Fifth and Sixth Cervical Nerves. C. H. Cattle.
4 Deep Ulnar Nerve Paralysis and Functional Powers. Tennyson Pitmore.
5 Redex Disturbances Associated with Adherent Prepuce. Robert M. Simon.
6 Tetany Associated with Muco-membranous Colitis and Phthisis. H. Hyslop Thomson.
7 Case of Hemiplegia Occurring During Whooping Cough and Diphtheria. Henry Fraser.
8 Lesion of Post-central Convolution Without Paralysis. C. Birt.
9 *Alleged Increase of Diseases of the Nervous System. John M. Rhodes.
10 Case of Properitoneal Hernia. H. Betham Robinson.
11 Abstract of a Report on a Recent Outbreak of Illness Due to Milk. Henry Kenwood.

1. **Carcinoma of the Esophagus.**—This case, which is carefully reported by Hewetson and Saundby, is of interest especially as being an exception to Semon's law of the early implication of the abductor laryngeal muscles. The law is stated as follows:

> The occurrence of isolated paralysis of the abductor filaments of the recurrent laryngeal nerve in cases in which the roots or the trunks of the spinal accessory, pneumogastric and recurrent nerves are injured or diseased, is not an isolated pathologic curiosity. There is a definite proclivity of the abductor fibers to become affected in such cases either at an earlier period than the adductor fibers or even exclusively.

In the case here reported the adductors were distinctly involved while the abductors appeared to act well until a few days before death. Both physiologically and pathologically the adductor displacement was earlier and more intense than that of the abductors.

9. **Increase of Insanity and Nerve Diseases.**—Rhodes uses statistics to show that the prevalent notion as to the increase of nervous disease and insanity is not entirely correct. He points out that while general paralysis, insanity, paraplegia and some other diseases of the nervous system seem to be on the increase still others, reported under the names of softening of the brain, epilepsy, etc., have markedly decreased within the past ten years. He thinks the figures make it almost questionable if there is an increase in nervous troubles, but still some, admitting this, assert that there is a terrible increase in insanity. He takes up this question and finds that the total number of insane has risen markedly and that the low recovery rate under better care casts a burden on the tax payers. The most potent of the changing conditions in producing insanity is the crowding of the population into towns and with that crowding has come the increase of rents, making housing a serious matter to the poorer classes. The confidence of the public in the state care has gradually in-

creased and the visible cases of insanity are consequently more numerous.

The Lancet, London.

March 12.

12 *Treatment of Cancer of the Breast by Operation. W. Watson Cheyne.
13 *Evolution and Action of Certain Muscular Structures of the Heart. Arthur Keith.
14 *Congenital Origin of Hernia. R. Hamilton Russell.
15 Ambulatory Treatment of Fractures of the Lower Extremity by Hoefticke's Modified Hessing's Splint Case Appliance. T. H. Openshaw.
16 *Inquiry Into the Source of Scarlatinal Infection and Its Bearing on Hospital Treatment. R. M. Lauder.
17 *Abstract of a Contribution to the Study of the Action of Indian Cobra Venom. R. H. Elliot.
18 Treatment of Incontinence of Feces by the Submucous Injection of Paraffin. Arthur H. Burgess.
19 *Therapeutics of Ichthyol Compounds; with Special Reference to Ichthodiom and Ichthargan. James Barset.
20 Case of Metritis and Cellulitis in the Puerperium Treated with Antistreptococcic serum. John W. Duncan.

12. **Cancer of the Breast.**—Cheyne advocates the complete operation in cancer of the breast, clearing out the lymphatic glands and vessels in the axilla and removing all skin over the prominent part of the breast, and if the cancer is laterally situated, the skin incision should nowhere approach the cancer closer than a couple of inches. The question as to whether the glands in the posterior triangle of the neck should also be removed in all cases is mentioned and he has become inclined to clear the supraclavicular space more than formerly and take out the fat and glands of the lower neck. Any marked enlargement of the supraclavicular glands in his opinion makes the case an inoperable one. He goes into the figures in his own experience; he has had 34 private patients that he was able to keep track of to some extent. In these cases from 6 to 13 years have elapsed since the operation; 17 of these 34 cases are still alive and well, without recurrence. In 14 cases recurrence has taken place and 11 of these have died from the disease; 2 patients have died of other troubles, one without any recurrence 2 years later, and the other 7 years after operation. One case has been lost sight of. The figures, therefore, show that from 50 to 55 per cent. of the cases are alive and well after periods ranging from 6 to 13 years. If these cases had been selected ones he would probably have excluded 11 of them; 2 of these, indeed, were practically hopeless from the start. Nevertheless, of these 11 cases, 4 have remained free from the disease, 1 for 10 years, 1 for 9½, 1 for 7½ and 1 for 7 years, the latter dying of heart disease. He analyzes the cases according to the rapidity of growth, the extent of the disease and the appearance of recurrence, etc., and holds that if the deposits are not cut into at the time of operation and removal is sufficiently extensive, the chances are that at least 50 per cent. of the cases will recover. Cancer is a very local disease in its commencement. If all that exists of it can be gotten rid of, there is no reason to expect a recurrence.

13. **Muscular Structures of the Heart.**—Keith continues his lecture on the muscular structures of the heart as relating to function, showing the manner in which the valves are rendered competent and orifices closed. He thinks we should restore to some extent the former relationship between the anatomy and physiology, for no description of the anatomy of the heart can be considered satisfactory unless it shows the meaning of the structure of the organ.

14.—This article appeared elsewhere. See THE JOURNAL of March 12, ¶17, p. 741.

16. **Scarlatina.**—Lauder holds that infection in this disorder is due to throat involvement and not to desquamation. In the Southampton Fever Hospital the patient is examined and a swab taken from the throat for bacteriologic examination; doubtful cases are put in the observation ward and detained or sent home, according to the diagnosis, the ward being disinfected immediately after their removal. Typical cases of scarlatina are put into the "acute room" and kept there until the acute stage is past and diphtheria is excluded. They are then removed to the general ward, where recent cases are kept apart from the convalescent ones. This is done with the mild as well as with the severest forms. If at any time aural or nasal discharges, enlarged tonsils, glands, etc., develop, the patient is moved from the general ward to a special pavilion reserved for such complications. At the end of the third week, if free from complications, the patients are transferred from the general ward to another pavilion which has been thoroughly disinfected and to which no cases are admitted except through the out-bathing station with the same precautions as if they were discharged from the hospital. They are kept here for one week, apart from all the other patients, and the nose, throat and ears carefully douched with a disinfectant each evening after bathing. At the end of a week—that is, at the end of the fourth week of the disease—they are sent home after passing the out-bathing station, without regard as to whether they are still peeling or not. After they are discharged no patients are admitted into the same pavilion until it has been thoroughly disinfected. The general wards are thoroughly disinfected at least once a month. These methods have not only freed them from the occurrence of albuminuria, enlarged glands, discharges of the nose and ears, but have reduced the duration of the fever and the periods which the patient had to be kept in bed and left them during the year without a single case of post-scarlatinal diphtheria or relapse. He gives a tabulated analysis of cases and brief accounts of a few.

17. **Cobra Poison.**—This research was undertaken by Major Elliot to ascertain the precise part played by the action of the poison on the various important centers and organs. A condensed summary of his conclusions is here given: 1. Cobra venom acts directly on the muscle tissue of the blood vessels or through their vasomotor nerve endings, contracting the arterioles and raising the blood pressure and in frog vessels the action can be traced down to a dilution of 1 in 10,000,000. 2. Cobra venom also acts on the isolated frog ventricle, killing in it a position of firm systole if the solution is concentrated and stimulating it if a weak strength is employed. The limit of the speedy lethal action on the isolated heart is reached at a concentration of about 1 in 500,000 and the stimulating action can be traced down to at least 1 in 10,000,000. This action brings cobra venom into the line of glucosids of the strophanthin group, though its action is much more rapid. Atropin sulphate intensifies the action of cobra venom. 3. Cobra venom powerfully affects the isolated mammalian heart when the solutions are introduced through the coronary circulation. The actions seem to be two; one, directly on the heart muscle and nerve endings, and the other on the intracardiac vagal mechanism which makes for inhibition. The result is that with a strong solution we find irregularity and extreme excitement of the heart followed by early death in systole, and with lesser concentration this yields to a prolonged phase in which the tonic action of the poison on the heart is pronounced. Cobra venom interferes with the circulation through the heart in a marked manner, probably through contraction of the coronary vessels and a condition of tonus. 4. In low lethal dose cobra kills by paralyzing the respiratory center. This is gradually evolved and there is evidence of heart stimulation preceding the paresis as greatly increasing the venosity of the blood and slow asphyxiation. If the life is prolonged by artificial respiration and if the dose is very small, the phrenic and other motor nerve endings may become paralyzed. The convulsions preceding death are purely asphyxial and each is followed by a phase of exhaustion of the respiratory mechanism which is almost certainly central. If a large dose is given the respiration is quickly affected and may cease at once, and the patient dies if artificial respiration is not quickly resorted to. With a smaller dose the rhythmic activity of the center reasserts itself, but it ultimately fails. By applying cobra venom directly to the exposed medulla of a rabbit Elliot found that the respiratory center may be paralyzed without the phrenic nerve ends of the heart being appreciably affected. If very large doses are injected death may occur by cardiac failure before the respiratory mechanism gives way. 5. Cobra venom in low lethal doses subcutaneously raises the general blood pressure, but the drug acts on the muscle tissue of the vessels and increases the force of the heart beat and stimulates the vasomotor center. The late fall in the heart beat is due to cardiac inhibition caused by gradual

asphyxiation and the direct stimulating action on the vagal inhibiting center, and probably also by stimulation of the vagal nerve ends by the circulating venom. It is probable that a stage of exhaustion of the heart muscle follows early stimulation and the exhaustion of the heart is probably produced by the strain of having to work against the abnormally high blood pressure. 6. When injected in large doses and given intravenously there is a sudden fall of the blood pressure and a subsequent rise, provided the dose has not been too large, and a final fall to zero. The early fall is undoubtedly due to inhibition. 7. When the secondary rise of blood pressure following the primary fall occurs it is due to the same factors which caused its occurrence when the small dose was injected. It is merely a question of cardiac failure. The direct inhibitory action of the venom through the vagal center is capable of overcoming the tendency which the blood circulating through the heart muscle has to throw that muscle into death in systole. If it were not for these two rival forces cobra poisoning would kill by its direct action on the heart muscle. When the dose is very large the direct muscle stimulation may be so intense as to overcome the maximum inhibitory impulse and the heart dies in systole with a quickened beat and is found after death as hard as a contracted postpartum uterus.

19. **Ichthyol Compounds.**—Ichthyol is a hydrocarbon oil obtained from a fossiliferous mineral and this, after being acted on by sulphuric acid, gives us ichthyol-sulphonic acid. It is the ammonia salt of this acid which is known commercially as ichthyol. Burnet reviews the various compounds and their substitutes: 1. Iron-ichthyol or ferrichthol, a brownish-black amorphous powder, odorless and tasteless, which has been very useful in his hands, in some cases when other iron preparations could not be tolerated. He thinks it is an excellent remedy in secondary anemia. In chlorosis he has, however, seen no good follow its persistent employment. He thinks the action of iron is greatly aided by the presence of ichthyol and that it has a wide sphere of therapeutic application in all its combinations associated with anemia. His own observation of its value in general diseases are borne out by Unna in regard to dermatologic conditions. Sodium-ichthyol is a solid preparation which is not so active in pulmonary disease as the original ammonia salt, though more easily taken. It checks the fermentative processes in chronic gastric catarrh. Generally speaking, when ichthyol is indicated, this should be prescribed except in case of pulmonary disease. Calcium-ichthyol is well suited for use in dermatologic practic and is readily taken by children. Within the last few years ichthyol has been made use of as a vehicle for certain insoluble agents such as creosol, eucalyptol and even iodin. Out of all the preparations he thinks two stand forth pre-eminently, viz., ichthoform and ichthargan, the former being a compound of ichthyol with formic aldehyd and the latter a silver salt of ichthyol. He finds ichthoform of value as an intestinal astringent and antiseptic, in summer diarrheas of children, etc. It is not poisonous and can be given in doses ranging from 2 to 10 grains three times a day. He prefers to give it as a sandwich between bread and butter. He thinks rectal administration should also be tried. Polacco has used it in enteric fever in doses of .5 gram frequently repeated, with good results. As a dusting powder in varicose ulcer he has found it of special benefit and for foul ulcers he knows no more trustworthy remedy. With equal parts of boracic acid it will be found serviceable as a dusting powder for general use. It is also of special value as an ingredient in ointments and he has suggested its use in the form of ichthoform gauze as a substitute for iodoform gauze for packing cavities. He says it is one of the most efficacious antiseptics we at present possess, especially in cases of intestinal disease where its action is most certain, is more certain and less harmful than salol or similar substances and is an excellent substitute for iodoform where the latter is indicated, is odorless and markedly nontoxic. For internal administration it is best given in small doses frequently repeated. His experience with ichthargan has not been so extensive as with ichthoform, but he speaks of its value in gonorrheal urethritis, gynecologic affections, dermatologic practice and nose and throat disorders. He says it is the remedy par excellence in atrophic rhinitis. It may be safely given internally in a mixture of from 0.5 to 2 grains in 8 ounces of water, of which a teaspoonful is taken three or four times a day. It seems to be useful in promoting healing in gastric ulcer and has been recommended by various observers in eye diseases; in ointments for skin disorders he has found it of very great use.

The Practitioner, London.

March.

21 *Diagnosis of Enteric Fever. Claude B. Ker.
22 *Anti-typhoid Inoculation. A. E. Wright.
23 *Black Urine. Archibald E. Garrod.
24 Series of Cases of Cancer of the Mouth and Fauces. Stanley Boyd and W. H. Unwin.
25 Two Lectures on Eczema. Arthur Whitfield.
26 Notes on Medical History in Egypt. P. M. Sandwith.
27 Some Recent Work on So-called Chronic Metritis and Endometritis and Their Relation to the Life-history of the Uterine Muscle. W. E. Fothergill.
28 Review of Recent Work in Ophthalmology. E. Treacher Collins.
29 Health Factor in Education. F. G. Bushnell.

21. **Diagnosis of Typhoid.**—The early diagnosis of typhoid is often impossible, and medical aid is seldom called in until the case is somewhat advanced. Ker notes the appearance and facial expression, which are suggestive; the slight hectic flush and widely dilated pupils are often observed during the first fortnight. The gradual rise of temperature is a point of interest, also dicrotism of the pulse and a lower rate than would be expected from the high temperature. This combination should always suggest typhoid. Again during the early period it is unusual to find the respiration very frequent, and if above 28 or 30 in the adult we should suspect pulmonary disease in preference to typhoid. Tumidity of the abdomen is so much the rule that a case of flat or hollow abdomen is usually not typhoid. The value of gurgling is overrated. The main point is the recognition of the spots. They are not seen in half the hospital cases, but in many instances it is probable that they have been present previous to admission. Their absence is of no value in diagnosis, though their presence is typical and practically final, and the presence of even atypical spots is of considerable value in the diagnosis. The presence of slight bronchitis or bronchial catarrh has not been duly estimated. A case of continued fever without definite symptoms, but with a slight degree of bronchitis, is very probably typhoid. The list of diseases which may be mistaken for typhoid is very large, and the chest should be thoroughly examined before the diagnosis is made, to exclude pneumonia and tuberculosis. Some cases of tubercular meningitis may give trouble, and, in the early stages, tubercular peritonitis. Colon bacillus infections are also mentioned as producing difficulty, but these cases should be treated the same as enteric. The diazo-reaction is found in other conditions, and its chief value is rather in its absence than in its presence. A case of continued fever not giving this reaction between the sixth and twelfth days is in all probability not typhoid. The leucocyte count in typhoid is low, the multinuclear cells are diminished in percentage and the uninucleaars are increased, while the eosinophiles are few. The blood changes, however, are of only limited value in the diagnosis. The isolation of the bacillus and the serum reaction tests are the real final proofs. It is well to inquire, however, whether the patient was ever vaccinated against typhoid or has had typhoid previously. A negative Widal reaction in the first fortnight means little, but if still negative in the third week is strong presumptive evidence against enteric fever. After three weeks a negative reaction practically excludes the disease.

22. **Antityphoid Inoculation.**—Wright gives the technic, dosage, symptoms and results. He advises two consecutive inoculations adjusted to avoid the supervention of constitutional symptoms rather than one severe one. He points out the fallacies and errors that may occur and gives elaborate tables. He thinks that undoubtedly a reduction in the incidence of typhoid fever was achieved in S. Africa, varying from six-fold to twenty-eight fold and a striking diminution in the mortality. The death rate among the inoculated was comparatively small. As regards the duration of the protection, it

appears that it may exert a protective effect for two years after the inoculation.

23. **Black Urine.**—The various conditions which may cause a dark-colored urine, including jaundice, hematuria, hemoglobinuria, hematoporphyrinuria, melanotic sarcoma, alkaptonuria, ochronosis and various drug effects are described by Garrod. True melanuria associated with melanotic sarcoma is rare. One must be acquainted with all the conditions and the means of distinguishing one from another before one can estimate their diagnostic importance. This is also still more true as regards prognosis, as whereas the occurrence of true melanuria is an event of the worst omen, as indicating the recurrence of melanotic growths in the viscera, there is an equal degree of blackness in alkaptonuria, which, so far as we know, is harmless. Between these extremes are various conditions of differing degrees of gravity.

Journal of Tropical Medicine, London.

March 1.

30 *Canine Malaria. A. B. Daigetty.
31 Elucidation of Sleeping Sickness. (Continued.) Louis Sambon.
32 Effects of Anti-malarial Campaign at Ismailia. Professor Boyce.

30. **Canine Malaria.**—See editorial in this issue.

Presse Médicale, Paris.

33 (1, No. 15.) *La myélémie. Sa valeur séméiologique. P. E. Weil and A. Clerc.
34 *Les hérédo-syphilitiques. A. Boissard.
35 *Action thérapeutique des leucocytoses provoquées. F. Ramond.
36 *Le formol gérauié dans le traitement de la carie dentaire. André and Marion.
37 (No. 16.) Hommage au professeur Bouchard. See page 720.
38 *La sérothérapie du cancer. E. Doyen. From society report.
39 A propos de l'hypertension artérielle. R. Teissier. Ibid.
40 *Les capsules surrénales dans 3 cas d'athérome artériel. O. Josué. Ibid.

33. **Diagnostic Value of Myelemia.**—Contrary to what is observed in experimental research, in man no acute affection, with the exception of purpura and smallpox, determines decided myelemia. Leukemia and allied conditions constantly determine a myeloid reaction in both the blood-forming organs and the blood, but while in leukemia and certain cases of splenomegalia the myeloid hyperplasia resembles that of malignant growths by its exuberance and generalization, in typical pernicious anemia the process seems to be limited to a rejuvenation, a simple metaplasia. Besides these, there is only Biermer's disease which is accompanied by myelemia. The diagnostic value of myelemia is, therefore, most marked in smallpox, and it frequently allows the rash to be promptly differentiated from measles, scarlet fever and atypical syphilis. The myelemia does not always occur at an early stage, but when vesiculation commences it seems to be constant, and is always intense in comparison with the attenuated and inconstant myelemia observed in the purpuras. Myelemia is also extremely important for the differentiation of splenomegalia, accompanied by myelemia, which seems to be particularly malignant in the adult. The various forms of myelemia and the affections in which it is noted are carefully studied under the headings of leukemic myelemia, aleukemic myelemia and myelemia in acute or subacute infections. The authors protest against the term "pseudoleukemia" as being incorrect—there are no false diseases.

34. **Inherited Syphilis.**—Boissard comments on the fact which seems to be established that when a woman has once borne a child to a syphilitic all her children born afterward are liable to bear some syphilitic taint, although she may never have had but the one intercourse with a syphilitic, and the father of her other children may be sound. In his experience at Tenon Hospital he has frequently observed infants who seemed decrepit, arrested in their development, "without aptitude for life." Their curves of growth remain horizontal instead of rising, and this notwithstanding that the children are always hungry and crave more than the standard quantity of milk for their weight. Little dependence can be placed on the mother's statements, but her obstetrical past may suggest inherited syphilis, and the way in which the children thrive on mercury proves that it is needed. He gives it in the form of van Swieten's solution, twenty to sixty drops or even more, his experience demonstrating that newly born infants bear mercury remarkably well, probably on account of the good kidney elimination and the absence of teeth. He usually gives the mercury for twenty days at a time, with ten-day intermissions. He insists that this mercurial treatment must be kept up for several years, with intervals of suspension, returning to it whenever the child shows any arrest in its development in any way. He thinks that many instances of abortions or sterility may be due to unrecognized inherited syphilis, that is, to the syphilis of the grandparents.

35. **Therapeutic Action of Induced Leucocytosis.**—Ramond reports the results of research undertaken under the direction of Chantemesse. They show that the leucocytes which gather under the influence of the measures taken to induce hyperleucocytosis are destroyed by the action of these measures. New leucocytes take their place, but they are too immature to display phagocytic action, and acquire it only after a certain length of time. Consequently the induced hyperleucocytosis is in reality merely the destruction of the reserves of leucocytes which the organism has been keeping on hand in readiness for emergencies. The simultaneous injection of microbes and of the substance destined to induce hyperleucocytosis accomplishes better its purpose as the gathering leucocytes are able to deal with the pathogenic agents at once. But in the clinic, the physician is not summoned until the infection is already established, and hence can never take advantage of this phenomenon.

36. **Formaldehyd for Disinfection of Carious Teeth.**—André lauds a combination of formaldehyd and essence of geranium as the most powerful disinfectant and deodorizer known, while it does not injure the teeth in any way. His formula is 4 parts formaldehyd and 2 parts redistilled essence of geranium in 4 parts of 80 per cent. alcohol.

38. **Serum Therapy of Cancer.**—Doyen isolates from neoplasms of rapid growth a microbe to which he gives the name of *Micrococcus neoformans*. He described it in 1901, and he has been experimenting with vaccines and toxins derived from it. He has thus treated 126 cases and reports 21 as cured, 47 improved and still under observation, and negative results in 58. He states that eight months of cultivation are required for the production of a powerful toxin. The culture medium which he prefers is a peptonized bouillon made from cow's udders.

40. **Atheroma Due to Suprarenal Capsules.**—Josué suggested that arterial atheroma might be due to the suprarenals when he observed the high arterial tension which is induced by injection of suprarenalin and adrenalin. This theoretical assumption was corroborated by experimental research, and he now announces that the necropsy of three subjects with arterial atheroma still further confirms it. All three exhibited the anatomic evidences of hyperfunction of the suprarenal capsules.

Semaine Médicale, Paris.

41 (XXIV, No. 9.) The Heart in Case of Curvature of Spine or Deformed Thorax. E. Barié.—Le coeur dans les déviations du rachis et dans les déformations thoraciques.
42 *Suture tendineuse. F. Lejars.
43 Sur l'émission des rayons N dans certains phénomènes d'inhibition. A. Charpentier and E. Meyer. From society report.
44 *Emission des rayons N dans quelques affections nerveuses. G. Ballet. Ibid.
45 Action des radiations du radium sur l'hémoglobine, les ferments et les globules rouges. V. Henri and A. Mayer. Ibid.
46 Sur la sensibilité vibratoire dans les affections nerveuses. Marinesco. Ibid.
47 Lymphocytose du liquide céphalo-rachidien dans 3 cas de névralgie du trijumeau. Pitres (Bordeaux). Ibid.
48 Pregnancy Both Uterine and Abdominal in a Dwarf. Cesarean Section in Former Pregnancy. Van Cauwenberghe. Ibid.
49 *Radium Treatment of 4 Cases of Carcinoma in Esophagus. A. Exner (Vienna). Ibid.
50 *Les injections rétro-rectales de solution physiologique contre l'incontinence nocturne d'urine. Jaboulay. Abstract.
51 *Le salicylate de soude dans le traitement de la chorée d'origine non rhumatismale. Zaoussailov. Abstract.

42. **Tendon Suturing.**—Lejars illustrates a modification of the latest methods of suturing a severed tendon, which he thinks is more solid and less liable to pull out than any yet proposed. The needle is passed back and forth through the tendon stump to make a cross, each arm of which consists of

two parallel lines of thread. The ends of the thread are then tied around the stump of the tendon and the two stumps are approximated and tied together by these threads, supplemented by a few sutures at the edge of the stumps.

44. **N Rays in Nervous Affections.**—Ballet has found that there is less emission of the N rays in affections involving the peripheral motor neuron, such as paralysis or atrophy resulting from myopathy, neuritis or poliomyelitis. On the other hand, in affections involving the motor protoneuron, such as old hemiplegia with contracture, or spasmodic paraplegia, the emission of N rays is more marked from the paralyzed muscles than from their sound mates.

49. **Radium Treatment of Cancer of the Esophagus.**—Exner has treated 6 cases of cancerous stricture of the esophagus by introducing a scrap of radium embedded in dammar and fastened to a No. 16 sound. In 5 cases the stricture became enlarged and the dilatation persisted after the treatment was suspended. The increased permeability of the stricture is probably due to necrosis of the stricture tissue under the influence of the radium, and it thus gives permanent results.

50. **Retrorectal Injections of Salt Solution to Cure Incontinence.**—Jaboulay injects about 100 gm. of physiologic salt solution into the cellular tissue behind the rectum as a means of acting directly on the hypogastric plexus. The needle of a Roux syringe is inserted at the tip of the coccyx or to one side. No anesthesia is required. If one injection is not enough he repeats it two or more times and increases the amount. Incontinence of urine rebellious to all other measures was cured by two to four of these injections. The subjects were young women. In one case the amount injected was doubled at the two final injections before a cure was realized.

51. **Salicylate of Soda in Chorea.**—In 4 cases which had resisted arsenic, iron, bromid, etc., the children were promptly cured by a systematic course of salicylate of soda, although not a single feature of the cases suggested rheumatism or heart complications.

Berliner klinische Wochenschrift.

52 (LI, No. 9.) *Ueber die Einwirkung des galvanischen Stromes auf Tetanus-Gift, Tetanus-Antitoxin und Toxin-Antitoxin-Gemische. P. H. Römer and K. v. Behring.
53 *Ueber den Nachweis der bactericiden Reaction im Blut-Serum der Typhus-Kranken. R. Stern and W. Korte (Breslau).
54 *Zur Theorie der Bindung von Toxin und Antitoxin. Svante Arrhenius (Stockholm).
55 Reply to above. P. Ehrlich.
56 Das Megalerythema epidemicum. Die Grossflecken. (Erythema infectiosum Stickler). Ein acutes Kinderexanthem. Piachte (Berlin)—Rubeola.
57 Zur Frage des osmotischen Druckes der Ex- und Transsudate. C. v. Rzentkowski (Warsaw).
58 (No. 10.) Ueber einige seltener vorkommende peripherische Lähmungen. M. Bernhardt (Berlin).
59 Ueber die Intensität der Cholera-Amboceptoren-Bildung beim Kaninchen unter dem Einflusse der Alkoholisirung und der Misch-Impfung. R. Friedberger.
60 *Die Fürsorgestelle in der Charité. P. Jacob.
61 Anatomische Befunde bei der Wurmfortsatz-Entzündung und die Indication zur Appendectomie. Karewski.
62 *Die Behandlung der Ozaena mit Hart-Paraffin-Injektionen. R. Pilsen.

52. **Action of Galvanic Current on Tetanus Toxin and Antitoxin.**—Von Behring and Römer announce that application of a weak galvanic current increases the toxicity of a solution of tetanus toxin and reactivates an inert one. The toxicity of the fluid which accumulates at the cathode varies from that at the anode, and other paradoxical facts were noted, among them the phenomenon that sometimes a mixture of tetanus toxin and antitoxin proves more toxic when inoculated into small laboratory animals than a larger dose of the same mixture. The concentrated mixture proved harmless, while the tenth and fortieth dilution induced acute and fatal tetanus, and even the hundredth dilution killed a mouse. Behring regards as fundamentally important the findings of these experiments that the toxic action of the tetanus toxin molecule in a colloidal solution can be enhanced by conducting a weak current through it. Further experiments with other colloid solutions are in progress, and those with milk protein molecules are proving interesting. A whey free from casein is obtained from fresh milk and displays considerable bactericidal action in respect to the colon bacillus. When a 1 ampere current is conducted through this whey for ten minutes this antibacterial energy is found much more intense in the fluid collected near the anode, while it is much diminished at the cathode. Ultramicroscopic examination also showed that 2,000 molecules were visible in the fluid at the anode while only 25 could be discovered at the cathode and 1,000 in the intervening fluid. Whey not submitted to the electricity presented an average of 100 molecules in the field at each inspection anywhere in the fluid. Similar research on an anti-colon bacillus horse-serum, which showed about 50,000 molecules to the field beforehand, after a current of 1 ampere had been passed through it for fifteen minutes exhibited extremely intense bactericidal action and 400,000 visible molecules in the fluid near the cathode, with only 7,000 at the anode.

53. **Bactericidal Reaction in Serum of Typhoid Patients.**—Stern and Korte advocate tests of the bactericidal action of the serum as a more delicate diagnostic measure than agglutination. Less than half an hour is required for it, and the results are manifest in eight hours, or at most by the next morning. The principle of the test is the addition of the suspected serum to a combination of fresh normal serum and typhoid bacilli. By constantly reducing the amount it is possible to determine the smallest proportion which still displays bactericidal action. The suspected serum is heated to 56 C. to render the complement inactive, and is placed in a row of test tubes, diluted to 50, 100, 1,000-fold or more with .85 per cent. salt solution. The tubes are filled in turn with one-half, one-fourth, one-eighth, etc., of the original dilution and then filled to 1 c.c. with the saline. Then .5 c.c. of a 1/5,000 twenty-four hours' bouillon culture of typhoid bacilli is added to each tube, and also .5 c.c. of fresh rabbit serum diluted 10 or 15-fold with .85 per cent. salt solution. Each tube then contains 2 c.c. of fluid and the bacilli, with graduated proportions of the suspected serum. The set of tubes is then placed in the incubator and after three or four hours the contents are poured out on agar plates. These are kept for twelve hours in the incubator at the same temperature (37 C.), or the test can be limited to mere inspection of the tubes after eight hours in the incubator. In the controls, 35,000 colonies and more developed, while with dilutions of 1/2,000 to 1/16,000 none developed with the typhoid serum, and only 100 to 1,000 colonies in the dilutions above this to 1/256,000. The bactericidal action was still marked in a dilution of 1/4,096,000. The writers think that this method is destined to supplement the agglutination test in dubious cases and possibly supplant it where an early diagnosis is necessary. They had no opportunity to test any patients before the eighth day.

54. **Physical Chemistry and Serum Therapy.**—[Arrhenius is the noted Swedish physical chemist to whom one of the Nobel prizes was recently awarded. The importance of his physicochemical work and its results were set forth in an editorial in THE JOURNAL of March 5.] He here discusses Ehrlich's recent study of diphtheria toxin, published in the *Berliner klinische Wochenschrift*, Nos. 35 to 37, disagreeing with him on certain points, but extolling as "one of the many things for which Ehrlich is most to be praised, that he has always proclaimed that (physical and) chemical processes are concerned in the reactions between toxins and antitoxins as between bodies and antibodies in general." He comments with especial appreciation on Ehrlich's remark that scientific research should restrict itself first to the simplest explanatory possibilities, and not call on more complicated ones until the simple ones have been shown to be inadequate.

60. **Tuberculosis Dispensary at Berlin.**—Jacob reviews the work accomplished by this new institution during the four months since its foundation. It has already proved its great usefulness as a link in the chain of compulsory insurance of the working classes against sickness. Tuberculous subjects are diagnosed, watched over, contagion of others guarded against, and more favorable surroundings provided. The dispensary aims to do nothing which it is the right and duty of others to do, but to supplement and complete wherever the aid of others proves inadequate. Various charitable organizations co-operate with it.

62. **Paraffin Prothesis in Ozena.**—Fliess reports 12 cases of ozena treated by local injection of hard paraffin. The results far surpassed those obtained by other modes of treatment, and most of the patients are completely cured and the others so improved as to amount to a practical cure. All had been for years treated by various specialists with the usual insuccess. During the total of 32 injections no disturbances were noted in any instance. No mishaps have been reported from the use of hard paraffin.

Centralblatt f. Chirurgie, Leipsic.

Last indexed page 621.

63 (XXXI, No. 5.) *Ein sicheres Verfahren der Jejunostomie. G. Kelling (Dresden).

64 *Cholecystoenterostomie mit Bildung eines künstlichen Gallenganges. M. Kirschenberg.

65 (No. 6.) *Avoidance of Pneumothorax in Operations in the Thorax. F. Sauerbruch.—Ueber die Ausschaltung der schädlichen Wirkung des Pneumothorax bei intrathorakalen Operationen.

66 (No. 7.) Die Hepato-Cholangio-Enterostomie. H. Kehr (Halberstadt). One case.

67 Decapsulation of the Kidneys. G. M. Edebohls (New York).—Nierendekapsulation, Nephrokapsektomie (Edebohls) und Nephrolysis (Heveling).

68 *Ueber eine Modifikation der aseptischen Katheter-Einführung. J. Swiatecki.

69 (No. 8.) *Fall von Prostatotomia infrapubica. L. Heusner (Barmen).

70 Prevention of Entrance of Air During Intravenous Infusion. Rinar Nyrop (Copenhagen).—Beschreibung eines zur Lufttaufsammlung bei der Paeumaturie hergestellten Glasballons samt einem ferneren Vorschlage zur Vermeidung von Lufteintritt bei Intravenösen Infusionen, usw.

71 (No. 9.) *Trepanation unter Lokal-Anesthesie und Trennung der Galea ohne Blutung. L. Heidenhain (Worms).

72 Zur operativen Behandlung der habituellen Luxation der Kniescheibe. Alf Krogius (Copenhagen).

63. **Improved Jejunostomy.**—Kelling produces a jejunum fistula which closes water-tight, even during coughing, etc. He has applied it on 8 patients with highly satisfactory results, the survival being for several months, the longest being nine months and ten days. There was an inoperable cancer in each case, and under these circumstances the simplicity of the technic is not so important as the water-tight closure of the opening, and this was unfailingly realized. The special feature of the technic is that the projecting end of the stump of the intestine is tied and turned back inside, thus invaginated for about 5 cm. The drain is a 6 mm. Nélaton catheter, which passes through a small opening near the tip of the invaginatum. The upper, folding over end of the stump does not project beyond the inner layer of the abdominal wall, where it is sutured tight around the catheter.

64. **Artificial Biliary Passage.**—Krukenberg's patient was a debilitated man of 78, with severe icterus, commencing cholemia and other signs of cholelithiasis. The gall bladder was found filled with gravel and thick bile. It was evacuated, twisted 270 degrees on its longitudinal axis and thus transformed into a spirally wound passage similar to a normal cystic duct. It was fastened in this position with six fine sutures, and the fundus was implanted in the jejunum in such a way that it projected like a tuft into the lumen of the latter. The fever dropped at once, and in less than two weeks the icterus and liver tumor had entirely vanished and the patient has been freed from disturbances since the operation, which was undertaken last September. The prompt and durable benefit indicates that this mode of intervention is less serious than an operation on the common bile duct would have been. It is possible only when the gall bladder is large and elastic enough to be thus transplanted, and this can be determined beforehand.

65. **To Eliminate Pneumothorax in Intrathoracic Operations.**—Sauerbruch has constructed an air chamber in which operations may be performed on the thorax without interfering with respiration. It has proved perfectly successful on animals, and has allowed all kinds of operations to be performed inside the thorax without fear of pneumothorax. It aims to exclude entirely all atmospheric pressure during the intervention. When the atmospheric pressure is eliminated, the lungs do not collapse when they are opened to the air and the respiration proceeds normally. He found that he could open the thorax on both sides and even remove all the sternum and ribs, leaving merely small stumps, and all without interfering with the normal respiration of the animal, which continued unmodified as long as the atmospheric pressure was eliminated from its environment. The chamber which he has constructed is air-tight and large enough to admit the operator and assistant, the operating table and the body of the animal. The animal's head projects outside, a rubber cuff fitting tight around his neck. The air-pressure is regulated by an air-pump, while a valve in the wall allows air to enter just enough to maintain a constant negative pressure in the chamber. The operators did not experience any ill effects from remaining in this chamber. Mikulics and an assistant worked in it one day for an hour without discomfort, except from the warmth and moisture, which would be obviated by construction of a larger chamber. The one now in use is about 40x45x55 inches. It is made of boards, lined with tin, soldered at the corners, the entire top of glass. Sauerbruch is now preparing a monograph on the physiologic principles of this exclusion of atmospheric pressure as an aid for operating on the thorax, and intends to report in it his clinical experience to date of writing.

66. **Aseptic Introduction of Catheter.**—Swiatecki holds the catheter by the handle and lubricates it with a pair of long gynecologic forceps. He then seizes the end of the catheter near the tip, with the points of the catheter blades, and holds both forceps and the large end of the catheter in the right hand. The catheter thus is bent in the shape of a C, and when the forceps holds it near the tip the outline is like that of a D. This gives sufficient purchase on the catheter tip for it to be easily inserted in the meatus with the right hand alone, and the fingers have not touched the catheter at any point except near the handle where contamination does no harm.

69. **Infrapubic Prostatotomy.**—Heusner resected the lower half of the symphysis and the descending rami of the pubis to obtain access to the prostate in the case described. He has since established by experiments on the cadaver that it is possible to detach the prostate from the pubis and draw it entirely down below the pubis without resection of bone.

71. **Trephining Under Local Anesthesia.**—Heidenhain's experience with 2 cases in which trephining was performed without general anesthesia or any loss of blood, has been so favorable that he advocates his technic as an improvement over previous methods. He believes that even major operations on the skull can be safely undertaken with the combination of cocain and adrenalin which Braun recommends. To prevent bleeding from the galea Heidenhain commends his practice of taking a series of overlapping stitches with a single thread, on each side of the proposed incision. By pulling the ends of the thread the tissues are compressed and no bleeding can occur after the incision is made. If a little blood still escapes a ligature can be applied here and there. It is important to leave these threads in place and not remove them for eight to ten days. The needle should be semicircular, medium sized, and scrape along the bone as far as possible for each stitch. They should overlap half the length of the preceding stitch.

Centralblatt f. Gynäkologie, Leipsic.

Last indexed page 665.

73 (XXVIII, No. 5.) Vagitus uterinus. C. J. Bucura. Ibid. A. Sippel.

74 Eklampsie und vaginale Sectio cesarea. Westphal (Stolp).

75 (No. 6.) Ueber Verdoppelung der Vagina bei einfachem Uterus (double vagina with single uterus). F. Marchand (Leipsic).

76 Detached Head in Parametrium. C. Weber.—Ein abgerissener Kopf im Parametrium.

77 *Ueber popular-wissenschaftliche Bücher. G. Bruckhard (Würzburg).

78 (No. 7.) Eine Berichtigung zur Cervixfrage. H. Bayer.

79 Zur Kasuistik der Bauchhöhlenschwangerschaft (abdominal pregnancy). O. Nebesky (Innsbruck).

80 Male or Female? T. Landau.—Mann oder Weib? Reply to Neugebauer.

81 *Hyperemesis gravidarum. Oehlschlager (Dantzic).—Gegen das Erbrechen Schwangerer.

82 Ruptur der Symphysis während der Geburt (intrapartum). J. Backer (Budapest).

83 (No. 8.) Treatment of Fresh Laceration of Perineum. G. Vogel.

84 Ibid. J. Eversmann (Bonn).

85 Is Edema of the Vulva a Natural Protection of the Perineum or Does It Increase Danger of Laceration? R. v. Budberg (Dorpat).—Ist das Oedem der Vulva während der Geburt ein nat. Schutzmittel für den Damm oder steigert es gar die Gefahr des Zerreissens?

86 *Zur Hefetherapie der weiblichen Gonorrhoe (yeast treatment). O. Abraham.

87 *Accident During Attempt at Lumbar Puncture. Mathes (Graz).—Ein übler Zufall nach einem Lumbalpunktionsversuch.
88 Zur Frage der Beseitigung postoperativer Blasen-Scheidenfisteln (vesicovaginal fistulas). H. Bertram (Meiningen).
89 (No. 9.) *Das Eserin in der Behandlung der postoperativen Darm-Paralyse. G. Arndt (Posen).
90 Zur Technik der Wertheim'schen Carcinom-Operation. M. Walthard (Berne).
91 *Extramedian Symphysiotomy. L. Gigli.—Lateralschnitt des Beckens.
92 Die Gonorrhoe der para-urethralen Gange des Weibes (in the female). E. Pollak.

77. **Popular Science.**—Burckhard quotes extensively from two books on household medicine by a practicing woman physician in Dresden, to show the dangers from such popularly written works, evidencing such superficial knowledge, prejudice and lack of common sense. Among other points which he cites is its warning against mercury in syphilis, and its recommendation of a method of treating peritonitis which would be practically murder if carried out. He remarks that the most ardent advocate of opening the medical career to women would be silenced by a reading of this work, which is the production of a graduate woman physician whose name and titles he gives in detail. He also quotes from another work by a "nature doctor," which is now in its three hundredth thousand, to the effect that cancer can be cured by the non-surgical measures advocated. The sale of this book has been prohibited in Austria, but it is sold largely elsewhere.

81. **Hyperemesis Gravidarum.**—Oehlschlager ascribes the vomiting in pregnancy to an oversecretion of gastric juice in the stomach, induced by irritation of the innervation from the unaccustomed movements of the uterus substance. For fifty years he has been treating such patients by correcting the hyperacidity with bicarbonate and soothing the nerves with strychnin. Every two or three hours he gives a tablespoonful of the following mixture, and has never had a case that failed to respond promptly. His formula is 8 gm. sodium bicarbonate, 3 gm. tincture strychnin; 150 gm. distilled water and 30 gm. syr. cinnam. If he should happen to encounter a case rebellious to this medication he would induce abortion by injection of 3 gm. tincture of iodin in the uterus. He has long been convinced of the benefits of intrauterine injections of tincture of iodin in case of general sepsis of the uterus, such as occurs after delivery and operations on the uterus.

86. **Yeast in Treatment of Gonorrhea in the Female.**—Abraham comments on the harmonious results of his bacteriologic and clinical experiences with yeast and gonococcus infection.

87. **Possible Danger from Lumbar Puncture.**—Mathes' patient was a woman of 52, who was being operated on for carcinoma of the portio. The uterus was removed *in toto* according to Schuchardt. An attempt to induce spinal anesthesia was unsuccessful. The trocar entered deep enough, but no fluid escaped, except a drop of blood. The next day symptoms of meningitis developed and progressed to a fatal termination in five days. The necropsy revealed an aneurism of the left vertebral artery, with compression of the brain and medulla. The aneurism had perforated, and there had been much hemorrhage. The question then arose as to whether the lumbar puncture might not have contributed to the rupture of the aneurism, and if any fluid had been evacuated this might have seemed probable, but the evidence was against it in this case. It suggests, however, that lumbar puncture under similar circumstances in another case might possibly entail the rupture of an aneurism.

89. **Eserin in Post-Operative Paralysis of Intestines.**—Arndt describes 5 cases out of a large experience to demonstrate the life-saving efficacy of eserin in these circumstances. He injects 1 mg. of physostigmin (eserin) salicylate, an amount which is perfectly tolerated even by debilitated patients. He never had occasion to give more than 2 mg. in the twenty-four hours. When it does not prove promptly effective he supplements it by repeated lavage of the stomach, as he attributes the persistence of the atony to distension of the stomach, which is particularly liable to follow operations in the Trendelenburg position, and which is not influenced by the eserin.

91. **Extramedian Symphysiotomy.**—Gigli's extramedian symphysiotomy has been described in these columns, xl, page 133. In this address, delivered at the Italian Congress of Gynecology last October, he reviews the experiences to date with it. Fifteen women have thus been operated on, and a number were demonstrated to show the complete restitutio ad integrum, with a slightly enlarged pelvis, allowing normal deliveries thereafter.

Deutsche medicinische Wochenschrift, Berlin and Leipsic.

93 (XXX, No. 9.) *Tetanus from Shot Wounds. G. Schmidt.—Schrotschuss und Wundstarrkrampf.
94 Choked Disc After Contusion of Skull. J. Bachauer (Augsburg).—Ueber Stauungspapillie nach Schädelkontusion.
95 Voiar Sound. P. Hampeln (Riga).—Ueber den Voiarton.
96 Beitrag zur Kasuistik der Bindungs-Verhältnisse bei der Verdrängung von Diphtheriegift und Antitoxin. von Dungern (Freiburg). (Concluded from No. 8.)
97 *Zur Hotel-Therapie der Tuberkulose. G. Brasch (Berlin).
98 Lichen praemonitalis. J. Bowers (Hague). One case.
99 *Ueber den Parasyphus. P. Clemens (Freiburg). (Commenced in No. 8.) Critical review of the literature.
100 Hygienisches aus Kolberg. P. Fuchs.
101 *Ueber die sanitären Verhältnisse auf der Insel Formosa (Japan). H. Yamaguchi (ex-president of medical college in Formosa).
102 Discussion on True and False Stigmata of Hysteria. From society report.
103 (No. 10.) Zur Analyse des unregelmässigen Pulses. P. Hecksch (Berlin).
104 *Ueber die Verwendbarkeit des Jousset'schen Inoscopie. E. Körmöczi and K. Jammiger (Budapest).
105 *3 Fälle von Tetanus. Tourneau (Göttingen).
106 Ueber die Variabilität der Gonokokken. P. Schanz (Dresden).
107 Ueber einen Antihörper gegen Steapsin-Solution. A. Schütze. (Concluded.)
108 Puerperale Sepsis behandelt mit Aronson's Antistreptokokkenserum. Grochtmann.
109 *Ueber Lahtagen. R. Mond (Hamburg).
110 *Anesthesin bei Seo-Krankheit. L. Schilep (Hamburg).
111 Discussion on Case of Acute Cocain Poisoning Mentioned on Page 883. From society report.

93. **Shot Wounds and Tetanus.**—Schmidt asks why wounds from shot are not more often followed by tetanus, as it has been demonstrated that the cartridges almost invariably contain tetanus bacilli. He answers his own question by pointing out that when the missile is fired from a distance the accompanying paper is usually lost on the way, and wounds causing much laceration of tissues from nearby explosions are usually treated in such a way that the tetanus bacillus does not find conditions favorable to its growth. There is peculiar danger from the small wound caused by a particle of shot fired near the part and causing what is supposed to be an insignificant wound. He has observed 2 such cases. A small pocket or bicycler's pistol, loaded with fine shot, went off in the subject's hand, and one piece of the shot made a small wound in the forearm. It rapidly healed, but after a few days symptoms of inflammation developed in the depths and rapidly fatal tetanus followed in both instances. A scrap of cartridge paper was found in the wound in each case. Similar cartridges bought in the market were found almost invariably to contain tetanus germs, as also the raw material obtained from the factory.

97. **Cinnamic Acid in Tuberculosis.**—Brasch has treated 52 patients with Landerer's hetol (cinnamic acid) during the last four years, and his experience has been extremely favorable as he describes in detail. He has made about six thousand injections of the hetol and has never observed the slightest disturbance from its use.

99. **Paratyphoid Fever.**—Clemens reviews sixty articles that have been published bearing on this subject including the American contributions, and draws from them the clinical picture of paratyphoid infection. There is no characteristic feature to differentiate it clinically from typhoid, although cases of apparent typhoid with atypical intestinal symptoms should suggest paratyphoid, and possibly also hemorrhagic cutaneous affections, the dark macular spots differing from the roseola of typhoid.

101. **Sanitary Conditions on Island of Formosa.**—Yamaguchi relates that since Japan acquired this island at the close of the war with China in 1895, numerous sanitary reforms have been instituted. She first had to root out the bands of robbers and pirates and gain a firm political hold over the native races and the large Chinese population. The next step was

to combat the opium evil. The abuse of opium has extended enormously throughout the entire Chinese empire during the last sixty or seventy years. Although the Chinese government has been anxious to check it by legal restrictions, it has never been able to accomplish this as the forbidden drug is imported from England, and the evil is perpetually fostered in this way. The number of persons addicted to opium in the Chinese provinces is about as large as the number of persons in Europe who smoke tobacco. Poor and rich alike are addicted to opium and in the houses of the well-to-do it is served regularly after dinner. As the price is somewhat high the rich use it more than the poor. The Japanese government was, therefore, confronted with a deeply rooted evil, but the happy suggestion was adopted to officially class opium smokers as sick persons, and explicitly designate them as patients. Opium smoking was forbidden to minors, and adults have to obtain an official permit before they can purchase any of the drug. The government also made the production of opium a state monopoly. By these means it was hoped to gradually reduce the number of opium smokers, and the number did drop within a year from the 165,753 official permits issued in 1900 to 156,366 in 1901. Opium used to be prescribed by the local physicians as a panacea against nearly all affections. The Japanese government has sought to counteract this by supplying trained physicians. These physicians reside in districts two or three miles apart. They receive good salaries and, besides their private practice, have charge of medicolegal and sanitary affairs in their district, as well as the care of the poor. The opium smokers must obtain their permits from this district physician, and by so doing constitute themselves his patients and are regarded and treated as patients. There are more than 1,200 Chinese doctors practicing on the island, and a few English missionaries with very primitive medical knowledge. A state examination is now required of all newcomers. There are already 157 trained Japanese physicians on the island, with 11 hospitals erected by the government, the principal one being almost luxuriously fitted up at a cost of a quarter of a million dollars, with trained nurses and attendants. A medical school has been founded in which the natives are educated at the expense of the state after having taken a Japanese preparatory course and passed an official examination. Special attention is paid to experimental work, the students being required to control and confirm the facts taught them in physiology and bacteriology. Yamaguchi adds that Chinese physicians have not the remotest idea of experimental pathology. At first it was difficult to procure anatomic material as the Chinese ancestor worship rendered them superstitious about the dead, and the rumor was spread abroad that the Japanese wanted to get the hearts of dead natives to deliver them to the devil. Years of efforts were required before this tradition could be uprooted, but now there is no lack of anatomic material, utilizing the bodies of criminals and paupers. The Japanese language is taught from the primary schools upward, and the lectures are in this language. The elements of English, German and Latin are also taught in the college to aid in the understanding of technical terms. The graduating class in 1903 numbered 15. A number of students from southern China are enrolled in its membership, as the enlightenment introduced by the Japanese is spreading to the adjacent mainland. Yamaguchi adds in conclusion that sewage and drinking water problems have also been met and solved, harbors built, etc., the drug and midwifery trades reorganized, and that the Japanese government has thus sown all over the land a rich seed from which it hopes to reap a fine harvest in the time to come.

104. **Inoscopy.**—This method of detecting tubercle bacilli in effusions was described in THE JOURNAL, xl, page 546. Fourteen cases were tested in the research here described. The signs of tuberculosis were unmistakable and the inoscopy was applied to ascertain its corroborative value. The results were positive in only 4 out of 12 cases and were negative in the 2 cases of ascites.

105. **Antitoxin Treatment of Tetanus.**—Tourneau's experience with the 3 cases reported has convinced him that tetanus antitoxin has no favorable influence when not injected until after the first symptoms of tetanus have developed.

109. **Lactagol for Promoting Lacteal Secretion.**—Mond ordered the preparation of cotton seeds, known as lactagol, for a number of nursing women and found that the secretion of milk materially increased under its influence. His results confirm those mentioned in abstract 80, page 744. The material to date has not been very large, but the results have been so invariably excellent that the writers hasten to advocate the general use of cotton-seed preparations. In the form of oil cake it has thoroughly established its value in dairies.

110. **Anesthesin in Seasickness.**—Schliep has been the medical officer on a ship making transatlantic and other trips, and has had frequent opportunity to appreciate the efficacy of anesthesin as a means for preventing seasickness. Passengers who had been seasick on previous voyages were given three or four powders of anesthesin, each .5 gm., as a prophylactic measure during the first hours after the ship sails, repeating these doses for a few days, according to circumstances. The majority of persons thus treated showed no symptoms of seasickness during the entire trip. It also exerted an unmistakably favorable action when its administration was not commenced until the first manifestations of seasickness developed, the loss of appetite and nausea, but after vomiting was once established and the seasickness well under way the anesthesin was unable to arrest it. Patients at this stage are apt to be too apathetic to be induced to take anything. As anesthesin is comparatively innocent, 2 and 3 gm. can be given during the day with impunity. Its efficacy as a preventive of seasickness confirms what von Noorden has asserted in regard to its value in cases of ulcer of the stomach, nervous dyspepsia, vomitus gravidarum, hyperesthesia of the stomach, etc.

Münchener medicinische Wochenschrift, Munich.

112 (L, No. 9.) Ueber das Vorkommen von Levulose im Fruchtwasser (liquor amnii). A. Gürber and Grünbaum (Würzburg).
113 Bakteriologische Untersuchungen über Masern-Conjunctivitis (in measles). E. Schottelius (Freiburg).
114 Das Schleimhaut-Exanthem der Masern (mucous in measles). O. Rodel.
115 *Die subkutane Eiweissernährung (albumin feeding). Credé (Dresden).
116 Ueber congenitalen, halb-seitigen Riesenwuchs (unilateral giant growth). H. Bruning.
117 Cephal-Hematom älterer Kinder (of older children). H. Friedemann (Leipsic).
118 Ueber die Beurteilung der Unterbrecher (interrupters). F. Dessauer.
119 Egypten und Tuberkulose, von Becker (Cairo).
120 Ein merkwürdige centrale Störung der Geschmacksempfindung (taste). G. Köster. (Commenced in No. 8.)
121 Alms of the New York German Medical Society. Carl Beck. —Ueber erstrebenswerte Ziele der Deutschen medicinischen Gesellschaft der Stadt N. Y.

115. **Subcutaneous Albumin Feeding.**—Credé has been for years trying to find a substance that could be utilized for keeping up the strength of patients after operations which forbid temporarily the use of the stomach. He thinks he has accomplished this with a preparation of meat which contains 95 per cent. of easily soluble albumin in a readily assimilated form, with traces of iron, and .2 per cent. salt. The albumin in this preparation, which he calls kalodol, is in a form resembling that of the albumin in the circulation and is assimilated without effort. A person weighing about 125 pounds requires in the neighborhood of 80 gm. albumin a day, but only about a third of this amount when sick, not more than 27 gm. Four subcutaneous injections of the kalodol during the day supply about 20 gm. of albumin, which can be supplemented by more given by rectal injection, absorption of the kalodol from the rectum being remarkably rapid and complete. He has found it a peculiarly beneficial and almost life-saving measure to add 50 gm. of a 10 per cent. kalodol solution to 500 gm. of physiologic solution when the latter was given subcutaneously. By injecting where the skin lies loose on the fascia, injecting under low pressure and delicately stroking away the accumulating fluid, it is possible to avoid any reaction, especially when the amount is injected at two or three separate points. The kalodol is absorbed so rapidly in the rectum that several enemata can be given during the day. It leaves no residue to putrefy in the bowel.

Virchow's Archiv, Berlin.

Last indexed page 628.

122 (CLXIV, No. 1.) Islands in the Gastric Mucosa Similar in Structure to the Zone of the Cardial Glands and Region of the Fundus Glands, and the Glands in the Upper Segments of the Esophagus Similiar to the Lower, Esophageal Cardial Glands. H. Schridde.—Ueber Magenschleimhautinseln vom Bau der Cardialdrüsenzone und Fundusdrüsenregion und den unteren, oesophagealen Cardialdrüsen gleichende Drüsen im obersten Oesophagusabschnitte. Found in 70 per cent. of 80 cadavers.

123 The So-called Upper Cardial Glands of the Esophagus. A. Rochert.—Ueber die so-gen. Cardialdrüsen des Oesophagus.

124 Die Regeneration des Knorpelgewebes (of cartilage tissue). M. Matsuoka.

125 Study of "Granular Pathology." H. Marx.—Ueber vitale und supravitale Granulafärbungen bei Acts-Keratitis.

126 Zur Pathologie des elastischen Gewebes der Milz (tissue of spleen). B. Fischer.

127 *Pathology of Liver. R. Tischner (Rostock).—Vergleichende Untersuchungen zur Pathologie der Leber.

128 (No. 2.) *Alkoholismus und Degeneration. G. von Bunge (Basle).

129 Der Ursprung der Plasma-Zellen. L. Ehrlich (Hamburg).

130 Development of Cicatrix. R. Minervini (Genoa).—Ueber die Ausbildung der Narben.

131 Processes in Salivary Glands After Obstruction of Outlets. O. Langemak (Rostock).—Zur Kenntnis der Vorgänge in den Speicheldrüsen nach Verlegung ihres Ausführungsganges.

132 Ueber Hidradenoma und Adenoma hidradenoides. L. Pick.

133 Pachymeningitis carcinomatosa hemorrhagica interna productiva mit Cutibacillosis agonalis. K. Westenhoeffer. One case.

127. Pathology of the Liver.—Tischner induced pathologic conditions in the liver by ligating the hepatic artery, occluding the common duct and by intoxication with phosphorus. His researches were conducted on a large number of rabbits. The extensive monograph is illustrated and the findings carefully analyzed.

128. Alcoholism and Degeneration.—Bunge has taken the trouble to send question blanks to a number of physicians practicing in Switzerland, Germany, Austria and Russia, Hungary and Turkey, inquiring in regard to the connection between alcoholism in the father and the nursing capacity of the daughters. His comprehensive statistics show that chronic alcohol poisoning in the fathers has a great influence on the daughters in this respect, and also on the resistance of the children to tuberculosis and nervous affections. He received 1,689 carefully filled out blanks in reply. In the total number 1,110 women were unable to nurse their children, and in the 716 cases in which the mother's capacity was mentioned he found that the mother likewise had been unable to nurse her children in 60.8 per cent. With a single exception, the 422 nursing women had mothers who had nursed their children. These figures show the marked hereditary character of the nursing capacity. He classified the statistics in many different ways, but all show the immense influence of alcoholism on the children. One table states that 24.2 per cent. of the children of 103 hard drinkers presented some nervous or mental affection. Tuberculosis was observed in 13.6 of these 103 hard drinkers and in 29.3 per cent. of their children. The proportion of carious teeth was also very high in the children of drinkers. He publishes his question blank and is anxious to collect further statistics in regard to the influence of alcoholism on degeneration.

Gazzetta degli Ospedali, Milan.

Last indexed page 624.

134 (XXV, No. 7.) *Sulla presenza del bacillo tubercolare nelle urine. V. Maragliano.

135 Su alcune reazioni emolitiche nel siero di sangue dei nefritici. F. Micheli.

136 La cefalopina e l'organoterapia cerebrale. M. Sciallero. See page 966 and also No. 10.

137 Contributo allo studio delle malattie funzionali del cuore. V. Ingraldi.

138 *Profilassia antimalarica. A. Mori.

139 Della profilassia ginecologica. A. Micciardelli.

140 (No. 10.) *Le spasme vasale. G. Reale.

141 Sugli equivalenti epilettici. C. Ortali.

142 L'anacalitemia proposta per la cura e la profilassi della tubercolosi. Figari. See page 966 and also Nos. 13, 16 and 19.

143 Contributo alla chirurgia dello stomaco (10 gastroenterostomie). F. Pelpis.

144 Un altro caso di cirrosi epatica con ernia ombelicale curato chirurgicamente. A. Mori. Recovery.

145 (No. 11.) *Sulla modalità di praticare la vaccinazione antitubercolare. V. Maragliano (Genoa).

146 (No. 12.) Sulla origine del fremito e di un tono diastolico sulle medie e picce e arterie nell' insufficienza aortica. G. Pasta.

147 Il valore uroclinico dell' indicana. G. Campanella.

148 Considerazioni sulla fisiologia del corpo tiroide. G. Migliucci.

149 Contributo alla sieroterapia anticarbonchosa Sclavo (anthrax). G. Recchi.

150 Le iniezioni di bromuro di calcio nell'epilepsia. T. Montagnini. Negative.

151 Ascaridiasi a forma tifoidea. E. Ligorio.

152 (No. 16.) Sindrome di Brown-Sequard. O. de Lollis.

153 Sulla malattia del Tomaselli. E. Festa.

154 Sterilizzazione del catgut col metodo di Claudius. N. Giannettasio. Favorable report. Ibid. C. Mencci.

155 (No. 19.) Sopra un caso di leukemia subacuta. G. Curio.

156 Il nucleone nei centri nervosi. E. Cavazzani.

157 Febbre gastrointestinale della seconda infanzia. V. Trischitta.

158 Sul comportamento del peritoneo verso gli agenti esterni in alcune lesioni violente dell' addome. G. Sulli.

159 (No. 22.) Intorno ad una cantanna fuoforata nel vitreo e nell' acqueo. E. Cavazzani (Ferrara).

160 Sulla febbre tifoidea. N. Muglia.

161 Caso di corea isteroepilettica. G. Morelli.

162 (No. 23.) *Dell'emostasi nella chirurgica epatica e nuovo contributo col cloruro dell'adrenalina. G. Gualdrini.

163 Il dolore appendicolare nell polmonite dei bambini (pseudomelia in children). P. Cavatorti.

164 *Contributo alla istologia patologica del cordone ombelicale nella sifilide. G. Franceschini.

134. Tubercle Bacilli in Urine.—Maragliano's findings were negative in 12 cases. The tubercular lesions were restricted to the respiratory organs.

138. Prophylaxis of Malaria.—Mori prefers euchinin to quinin and treated a party of 74 persons with it during the malarial season last year, giving 25 to 50 cg. before breakfast and dinner. Only 6 showed evidences of malaria and 2 of this number had abandoned the use of the euchinin for a week before the first manifestations. The infection yielded rapidly to resumption of the drug. Euchinin does not have the bitter taste of quinin, while it is readily assimilated and has no by-effects even after prolonged dosage. He thinks that possibly the euchinin has an agglutinating action on the erythrocytes.

140. Vessel Spasms.—Reale has observed a number of cases of spasm of the vessels and describes two typical examples, due to alimentary or autointoxication.

145. Vaccination Against Tuberculosis.—Maragliano has vaccinated a number of children against tuberculosis, the results constantly controlled by experiments on animals. The blood serum gradually acquired agglutinating power up to 1/100, the same as in the animals, and intravenous injection of the animals with virulent cultures of tubercle bacilli demonstrated that they were refractory, completely immune against tubercle infection. He thinks the probabilities are all in favor of the assumption that the children have been rendered similarly immune although confirmation of the test by inoculation is of course out of the question. He proceeds as for smallpox vaccination, and there is a slight febrile reaction the same as in the latter. By what he calls the "progressive" technic he commences with passive and goes on to active immunization. He first injects immunizing substances derived from the blood of immunized animals. This stage is followed by injections of these same substances plus substances derived from the bodies of killed bacilli, a material absolutely incapable of inducing infection. The third and final stage is the injection of products of the tubercle bacilli, also harmless. After a period of three to four months the serum has acquired antitoxic, antibacterial and agglutinating properties. The controls treated step by step in the same way acquire these same properties and prove completely immune to infection with virulent tubercle bacilli. The dead bodies of the bacilli are the chief factor in this vaccination, and the aim is to induce a focus of tubercular inflammation at the periphery entirely free from live tubercle bacilli. From this focus emanate the influences which induce the antitoxic, antibacterial and agglutinating properties, the reaction of defense on the part of the organism. This insures a true and special vaccination. He makes the injection in the arm as for smallpox vaccination. A small amicrobian abscess develops which is slow in healing, sometimes persisting for three or four months before completely healing. His experiences with animals have demonstrated beyond question, he believes, that it is possible to confer immunity by this simple technic. Maragliano adds that his research in this line preceded those of others by six years. Italy also took the lead in the administration of antitoxins by the mouth, as also in vaccinating man against tuber-

culosis. Elsewhere the question is still in the phase of mere hypothesis.

162. Surgery of the Liver.—In this comprehensive study of surgical intervention on the liver, Gualdrini emphasizes the value of adrenalin as an adjuvant to tamponing, patching with a piece of omentum or suturing. Injected into the parenchyma it serves to prevent hemorrhage during resection, especially when supplemented by ligature of the larger vessels.

164. Umbilical Cord in Syphilitic Infants.—Francoschini extols the advantages derived from histologic examination of the umbilical cord in dubious cases. It may elucidate symptoms and indicate the course of treatment necessary for mother and infant. The syphilitic lesions in the cord are usually restricted to the vessels and these syphilids may precede by months and years any other manifestation of the infection.

Meditsinskoe Obozrenie, Moscow.
Last indexed page 810.

165 (XL, No. 14.) K etiologii appendicita v zavisimosti ot postoyannykh tyazhelykh zapadenii obonyatelnoi pervostepeni v pribrezhye zastoi. A. B. Kabliukoff.

166 Study of 2 Cases of Cholelithiasis. P. A. Gortsun.—O kholitholicheskoi bolyezni.

167 Diagnostication and Treatment of Cholelithiasis. T. I. Borzekin.—Ibid.

168 K voprosu anatomii ostrago zaya (of acute glanders). M. G. Gurevitch.

169 (No. 15.) K patologii ostrago peritonitisa vaveshykh (pelioperitonitis exterior acuta). V. A. Mysrateff.

170 Bone Bound Conduction. A. Ivanoff.—O kostnoi svyahopovodimosti.

171 Deformed Jaw. T. T. Semyenteleff.—Udostva narushaego chelu. Two cases.

172 *Treatment of Syphilis by Subcutaneous Injections of Hermophenyl. M. A. Yehlenski.—O lyechenii syphilisa, etc.

173 Hemorrhagic Myelitis of Spinal Cord and Medulla. V. I. Mandrika.—Gistolozi hemorrhagitchnaago mielita spinnago i prodolgovatago mozga.

174 (No. 16.) K lyechenii syphilisa serdtsa (of the heart). V. G. Rudiza. One case.

175 K lyechenyiu syphilisa pleury i lyghikh (lungs). Y. O. Halpern.

176 *Case of Pseudo-chylous Pleuritis, Hydrothorax and Ascites. Prof. A. Rogamensky.—Slutchai pseudokhilnaago pleurita, etc.

177 (No. 17.) *Surgery in Trauma of Liver. V. N. Rosanoff.—Chirurg. vmyeshatelstvo pri travmatich pechyeni.

178 *Clinical Importance of the Revolving Chair and Table for the Differentiation of Certain Nervous Affections. S. T. von Stein.—Klin. znatchenie centrofugi dlya raspoznavaniya nyekotorykh nervnykh zabolyevanii.

179 K lyechyebiye skryto-protekayushtikh form ranyenykh mozgovoi tolschi (softening of cerebellum). V. F. Volyanovitch.

180 Another Case of Nemn Cured with Pyoctanin. D. T. Akhvlediani.—Novii slutchai lyechyebnyia vodyanago raka etalin piokteninom.

172. Hermophenyl in Syphilis.—Tchlenoff reports 33 cases of syphilis treated by subcutaneous injections of hermophenyl. It had an unmistakable influence, but less decided than that of mercury, on condylomatous lesions. The local traumatism of the injections is much less than that observed with mercury, and consequently it may be indicated for this reason in certain cases of syphilis.

176. Pseudo-Chylous Pleuritis.—The effusion in this case of pleuritis, hydrothorax and ascites was chyliform, but contained lecithin and also cholesterin. The patient was a probable syphilitic.

177. Surgery of Liver.—In the 4 cases described all but one of the patients recovered after the surgical intervention on the injured liver. In respect to the diagnosis of such injuries Rosanoff comments that it is rather difficult when there is no external wound to call attention to the special organ injured in the trauma. In his cases the rigidity of the rectus muscles was a striking sign, particularly demonstrative in one case in which rigidity of the left rectus was almost the only indication at first of serious trouble within. Operative intervention is imperative owing to the tendency to severe hemorrhage of wounds in the liver. Shock indicating internal hemorrhage demands immediate operation and hemostasis *in loco*.

178. Differentiation of Nervous Affections with the "Centrifuge."—Stein gives illustrations of the "centrifuge" or revolving table and the goniometer or angle-measure which he believes open new horizons for the differentiation of certain nervous affections. The centrifuge is somewhat like an individual merry-go-round. The findings of the tests reveal the greater or less ability of the subject to hold himself in a vertical position. He gives 22 illustrations of the findings on two patients, with 51 various views of the different attitudes assumed by the subjects before, during and after the tests. He is confident that both otiatrists and neuropathologists will find this means of investigation indispensable when it is once introduced. The subject can be whirled from left to right or the reverse, sitting or reclining, the eyes open or shut, and the findings compared with the normal standards which von Stein has carefully ascertained.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

A System of Practical Surgery. By Drs. E. von Bergmann of Berlin, P. von Bruns of Tübingen and J. von Mikulicz of Breslau. Edited by William T. Bull, M.D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. To be Complete in Five Imperial Octavo Volumes, Containing Over 4,000 Pages, 1,000 Engravings and 110 Full-Page Plates in Colors and Monochrome. Sold by Subscription Only. Vol. I.—Surgery of the Head. Translated and Edited by William T. Bull, M.D., and Walter Martin, M.D. Cloth. Pp. 850. Price $6.00. New York and Philadelphia: Lea Brothers & Co. 1904.

Progressive Medicine, Vol. I, March, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo. Pp. 257. Seven Illustrations. Per Annum, in Four Cloth-bound Volumes, $6.00. In Paper Binding, $4.00. Philadelphia and New York: Lea Brothers & Co.

Reports on Bovine Tuberculosis and Public Health. By D. E. Salmon, D.V.S., Chairman of the Committee on Animal Diseases and Animal Food of the American Public Health Association. Paper. Pp. 61. U. S. Department of Agriculture. Washington: Government Printing Office. 1904.

Studies Upon the Keeping Quality of Butter. 1.—Canned Butter. By Leo A. Rogers, Expert in Dairy Bacteriology, Bureau of Animal Industry. U. S. Department of Agriculture. Paper. Pp. 24. Washington: Government Printing Office. 1904.

Die Syphilide (Syphilis der Haut und Schleimhaut) II. Teil: Therapie. Von Dr. E. Jessner, Königsberg i. Pr. Paper. Pp. 71. Preis M. 1.20. Würzburg: A. Stuber's Verlag (C. Kabitzsch). 1904.

Transactions of the West Virginia State Medical Association. Charleston, May 26, 27 and 28, 1903. Instituted April 16, 1867. Paper. Pp. 144. Wheeling: West Virginia Printing Co. 1903.

Das Haarschwitzen Ursachen und Behandlung. Vierte Auflage. Von E. Jessner, Königsberg i. Pr. Paper. Pp. 51. Preis M. 0.80. Würzburg: A. Stuber's Verlag (C. Kabitzsch). 1904.

The Gazette Pocket Syphilis and Diphtheria. English and Medical. Second Edition. Flexible Leather. Pp. 216. Price 50 cents. New York: The Gazette Publishing Co.

New Patents.

Patents of interests to physicians Feb. 16 to March 15, 1904:

753198. Invalid lifting apparatus. Birgit Bratlie, Brooklyn.
753239. Atomizer. Albert S. Dixon, Los Angeles, Cal.
753445. Truss. Daniel T. Foley, Philadelphia.
753280. Antiseptic thermometer case. Philip C. Hay, Chicago.
753462. Emergency case. John B. Morris, Philadelphia.
753252. Movement cure apparatus. Charles Owens, Chattanooga, Tenn.
753364. Corvetia. Charles J. Pilling, Lansdowne, Pa.
753419. High-tension therapeutic electrode. Manuel R. Rodrigues, Brooklyn.
753261. Vaginal douche. Nicolaus C. H. Schwartz, New York.
753114. Breath guard. Leonidas Sennett and A. L. Moore, Russell, Ky.
753123. Inhaler. Cyrus T. Gamble, Diamondville, Wyo.
753153. Druggist's prescription cabinet. John F. Lonquist, Minneapolis, Minn.
753564. Truss for rupture. Byron J. Dowds, Canton, Ohio.
753597. Making a Salve. John P. Hoefner, New York.
753711. Thermometer case. Patrick C. Kellett, Brooklyn.
753500. Electrotherapeutic device. Charles E. Munns, Corning, Iowa.
753525. Making chloroform. Albert W. Smith, Cleveland, Ohio.
754276. Syringe. Edwin Bartsch, San Francisco.
754223. Optometer. Wm. J. Laughlin, Waunakee, Wis.
754079. Spiral vacuum tube for therapeutic purposes. Robert Mackietz, New York.
754283. Surgical chair. Alexander McDonald, St. Louis.
754281. Clinical thermometer holder. George H. Nettleton, New Haven, Conn.
754266. Hernial truss. Charles P. Norris, Chambersburg, Pa.
754267. Automatic dropper. Wolfgang Obermeir, Lacrosse, Wis.
754068. Invalid rocking chair. Boyd M. Owens, Wilkesbarre, Pa.
754015. Device for storing and administering serums. Frank G. Ryan, Detroit.
754291. Operator. Alexander Vermaer, Nieuwerstein, Amsterdam, and A. Lobrot, Utrecht, Netherlands.
754421. Massage machine. Philip J. Kroll, New York.
754025. Massage device. Ottoman Zar-Adusht-Hanish, Chicago.